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THE PROVINCE OF ALBERTA

OIL AND GAS

CONSERVATION BOARD

RESERVES OF

GAS

NATURAL GAS LIQUIDS

CRUDE OIL

AND

SULPHUR

OF

THE PROVINCE OF ALBERTA

AS OF

DECEMBER 31, 1962

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DECEMBER 31, 1995

CONSERVATION BOARD

OIL AND GAS

THE PROVINCE OF ALBERTA

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I. THE ESTABLISHED RESERVES OF GAS IN ALBERTA

In its March, 1962, publication of reserves, the Board estimated the marketable gas reserves of the Province as of December 31, 1961, to be 31.2 trillion cubic feet or the equivalent of 33.0 trillion cubic feet when converted to the basis of 1000 Btu per cubic foot. The Board finds the total remaining marketable reserves of the Province as of December 31, 1962, to be 32.4 trillion cubic feet or the equivalent of 34.3 trillion cubic feet when converted to the basis of 1000 Btu per cubic foot.

The largest portion of the increase of 1.2 trillion cubic feet is the result of additional drilling in previously discovered pools. New discoveries in 1962 again were considerably less than had been anticipated. This may be observed by referring to the section of the report dealing with trends. The Board believes the rate of new discoveries will continue at a low ebb until further extraprovincial markets materialize.

The method of estimating surface losses described in the March, 1962, report is again employed in this report. Briefly, the surface loss discount factor is intended to account for all past and anticipated future flaring, waste, and processing losses.

Major new discoveries and fields in which significant changes in previous discoveries have occurred are presented in the following tabulation:

Area	Dec. 31/61 Bcf	Dec. 31/62 Bcf	Change Bcf	Remarks
Ansell (Elkton)	-	80	+ 80	New two well discovery.
Carstairs (Elkton)	768	862	+ 94	Additional drilling plus lower surface loss.
Craigend (Grosmont)	6	100	+ 94	Additional drilling.
Harmattan East (Elkton)	630	901	+271	Additional drilling. 1961 figure includes Westward-Ho reserve of 60 Bcf which is now included in Harmattan East.
Hunter Valley (Mississippian)	-	100	+100	New one well discovery.
Lookout Butte (Mississippian)	200	400	+200	Additional drilling.
Marten Hills (Wabiskaw and Wabamun)	10	70	+ 60	Additional drilling.
Minnehik-Buck Lake (Pekisko)	300	489	+189	Additional drilling.
Paddle River (Jurassic and Mississippian)	40	150	+110	Additional drilling.
Pembina (Cardium and Blairmore)	757	876	+119	Decrease in surface loss plus additional drilling.
Pincher Creek (Mississippian)	1068	870	-198	Production history.

The remaining marketable reserves of 32.4 trillion cubic feet has been classified as follows:

	Within Economic Reach	Beyond Economic Reach	Total
Solution gas reserves	2.8	0.1	2.9
Associated gas reserves	3.9	0.1	4.0
Non-Associated gas reserves	22.3	3.2	25.5
	29.0	3.4	32.4

The Board, in arriving at its estimate of reserves, has, as in the past, considered all available information including estimates presented to it during the past year. The Board's estimate of established reserves for fields and areas having a remaining marketable reserve of 10 billion cubic feet or greater is presented in Table I-1. The table does not show individually, fields or areas having a remaining marketable reserve of less than 10 billion cubic feet, however, the sum of these reserves is shown at the end of the tabulation and is included in the Provincial total.

While only the established reserves are shown in the table, the Board does calculate proved and probable reserves. The relationship of the three types of reserves may best be exemplified by the following definitions:

Proved Reserves - the proved reserves in any pool consist of the gas recoverable from the area of the pool which has been completely delineated through the drilling of wells. A portion of the reserves may be under undrilled spacing units which are so close and so related to drilled spacing units that there is every reasonable probability that they will be produced when the spacing units are drilled or will be recovered by existing wells.

Probable Reserves - the probable reserves in any pool consist of the gas which is estimated to be recoverable from beyond the proved limits of the pool, based on normal geological expectation.

Established Reserves - are the reserves of gas whose existence and estimated amount can reasonably be counted upon and include all of the proved reserves and a judgment portion of the probable reserves recovered from the pool.

Proved reserves account for over 95 per cent of the Board's estimate of 32.4 trillion cubic feet of established marketable gas.

Table I-1 presents:

1) Name of field or area.
2) Geological formation containing the reserve.
3) An estimate of the initial gas in place, billions of cubic feet.

4) Discounts applied to the initial gas in place to determine producible and initial marketable gas, per cent.

5) An estimate of the initial marketable gas which is equivalent to the quantity of gas that in the Board's opinion will be marketed during the life of the reserve, billions of cubic feet.

6) An estimate of the quantity of gas actually marketed determined by applying the appropriate surface loss discount to the gas produced, billions of cubic feet.

7) An estimate of the remaining marketable gas after deducting marketable gas produced to December 31, 1962, billions of cubic feet.

8) The estimated gross heating value of marketable gas obtained from an actual measurement, otherwise estimated from an analysis of the gas or from comparison with similar pools, Btu per cubic foot.

9) An estimate of the remaining marketable gas as of December 31, 1962, on the basis of 1000 Btu per cubic foot, billions of cubic feet.

TABLE I-1

OIL AND GAS CONSERVATION BOARD

ESTABLISHED RESERVES OF GAS IN THE PROVINCE OF ALBERTA, DECEMBER 31, 1962

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
FIELD OR AREA	ZONE	INITIAL GAS IN PLACE BCF	LOSSES RESERVOIR/SURFACE PER CENT	INITIAL MARKETABLE GAS BCF	MARKETABLE GAS PRODUCED TO DEC. 31, 1962 BCF	REMAINING MARKETABLE GAS DEC. 31, 1962 BCF	ESTIMATED HEATING VALUE BTU/CU.FT.	REMAINING MARKETABLE GAS (1000 BTU BASIS) BCF	REMARKS
ACHESON	VIKING	14	25/5	10	1	9	1030	9	
	BASAL BLAIRMORE	37	20/15	25	1	24	1060	25	
	LEDUC SOLUTION	80	45/55	20	3	17	1120	19	
ACHESON EAST	BASAL BLAIRMORE	12	15/5	10	-	10	1090	11	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
ADEN	BOW ISLAND	5	20/5	4	-	4	1000	4	
	BASAL COLORADO	6	15/5	5	-	5	1000	5	
	MANNVILLE	2	10/5	2	-	2	1000	2	
	SUNBURST-ELLIS	16	20/5	12	-	12	1040	12	
	MISSISSIPPIAN	19	10/10	15	1	14	1040	15	
ALEXANDER	BASAL BLAIRMORE	110	15/5	90	67	23	1060*	24	
ALIX	BASAL BLAIRMORE	12	10/5	10	-	10	1090	11	PRESENTLY CONSIDERED
	NISKU ASSOCIATED	7	15/10	5	-	5	1130	6	BEYOND ECONOMIC REACH.
ANSELL	MISSISSIPPIAN	100	10/15	80	-	80	1040	83	
ANTELOPE	VIKING	40	20/5	30	-	30	1020	31	PRESENTLY CONSIDERED
	BANFF	11	20/5	8	-	8	1020	8	BEYOND ECONOMIC REACH.
ATHABASCA	GRAND RAPIDS	6	15/5	5	1	4	1030	4	SUPPLIES LOCAL UTILITY.
	WABAMUN	4	10/5	3	-	3	1020	3	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
ATHABASCA-EAST	WABAMUN	2	10/5	2	1	1	1000	1	SUPPLIES LOCAL UTILITY.
ATLEE-BUFFALO	BOW ISLAND	120	25/5	85	4	81	960*	78	
	BASAL BLAIRMORE	72	20/5	55	1	54	960*	52	
BANTRY-TILLEY	MILK RIVER	46	20/5	35	-	35	960	35	SUPPLIES LOCAL UTILITY.
	BOW ISLAND	20	20/5	15	-	15	970	15	PRESENTLY CONSIDERED
	BASAL BLAIRMORE	10	15/5	8	-	8	1160	9	BEYOND ECONOMIC REACH.
	BASAL BLAIRMORE ASSOCIATED	4	25/5	3	-	3	1160	3	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
FIELD OR AREA	ZONE	INITIAL GAS IN PLACE BCF	LOSSES RESERVOIR/SURFACE PER CENT	INITIAL MARKETABLE GAS BCF	MARKETABLE GAS PRODUCED TO DEC. 31, 1962 BCF	REMAINING MARKETABLE GAS DEC. 31, 1962 BCF	ESTIMATED HEATING VALUE BTU/CU.FT.	REMAINING MARKETABLE GAS (1000 BTU BASIS) BCF	REMARKS
Bawlf	Viking	11	25/5	8	-	8	1020	8	Presently considered beyond economic reach.
	Blairmore	3	20/5	2	-	2	1050	2	
Bashaw	Blairmore	7	10/5	6	-	6	970	6	Presently considered beyond economic reach.
	Leduc Associated	7	15/30	4	-	4	1220	5	
Beaver Creek	Wabamun	94	15/50	40	-	40	1050*	42	
Beaverhill Lake	Viking	180	20/5	140	1	139	1000	139	Supplies local utility.
	Basal Blairmore	4	15/5	3	-	3	1000	3	
Belloy	Cadotte	5	20/5	4	-	4	1020	4	
	Notikewin	9	20/5	7	-	7	1000	7	
	Gething	62	15/5	50	-	50	1000	50	
	Mississippian	23	10/5	20	-	20	1120	22	
Bellshill Lake	Viking	6	25/5	4	-	4	1040	4	Presently considered beyond economic reach.
	Blairmore	37	15/5	30	-	30	990	30	
	Blairmore Associated	3	15/10	2	-	2	990	2	
Berland River	Leduc	440	10/25	300	-	300	1000	300	
Berland River West	Wabamun	24	10/30	15	-	15	1020	15	Presently considered beyond economic reach.
Bigoray	Blairmore	14	15/5	11	-	11	1080	12	
	Mississippian	13	15/10	10	-	10	1080	11	
Bigstone	Gething	23	10/5	20	-	20	1100	22	
	Leduc	59	10/25	40	-	40	930	37	
Bindloss	Viking	430	15/5	350	30	320	970*	310	
	Basal Blairmore	31	15/5	25	-	25	990	25	
Bittern Lake	Viking	3	25/5	2	-	2	1020	2	
	Basal Blairmore	43	15/5	35	-	35	1070	37	
Black Butte	Bow Island	21	15/5	17	1	16	1010	16	
	Basal Colorado	25	15/5	20	3	17	1000	17	
	Mannville	6	15/5	5	-	5	1000	5	
	Sunburst-Ellis	35	10/5	30	16	14	1000	14	
	Mississippian	12	15/5	10	-	10	1020	10	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
FIELD OR AREA	ZONE	INITIAL GAS IN PLACE BCF	LOSSES RESERVOIR/SURFACE PER CENT	INITIAL MARKETABLE GAS BCF	MARKETABLE GAS PRODUCED TO DEC. 31, 1962 BCF	REMAINING MARKETABLE GAS DEC. 31, 1962 BCF	ESTIMATED HEATING VALUE BTU/CU.FT.	REMAINING MARKETABLE GAS (1000 BTU BASIS) BCF	REMARKS
Blindman River	Pekisko	23	10/5	20	-	20	1090	22	Presently considered beyond economic reach.
	Banff	18	10/5	15	-	15	1080	16	
Blueridge	Detrital	14	10/5	12	-	12	1100	13	Presently considered beyond economic reach.
	Mississippian	1	20/5	1	-	1	1130	1	
Bollogue Lake	Viking	3	25/5	2	-	2	1040	2	Presently considered beyond economic reach.
	Basal Blairmore	11	25/5	8	-	8	1100	9	
Bonnie Glen	Leduc Associated	440	10/15	338	3	335	1220	409	
	Leduc Solution	510	40/25	230	27	203	1220	248	
Bonnyville	Blairmore	5	20/5	4	1	3	980	3	Supplies local utility.
Boundary Lake South	Mississippian	27	10/5	23	5	18	1040*	19	
Bow Island	Bow Island	20	20/5	16	-1	17	1110	19	Storage Reservoir.
Boyle-Mustang-Amisk Lake	Blairmore	7	25/5	5	-	5	1000	5	Presently considered beyond economic reach.
	Nisku	6	15/5	5	-	5	990	5	
Braeburn	Cadomin	10	15/5	8	-	8	1060	8	
	Triassic	26	20/5	20	-	20	1090	22	
	Permo-Penn	86	10/10	70	-	70	1030	72	
Brazeau River	Mississippian	190	10/10	150	-	150	1040	156	Presently considered beyond economic reach.
Brooks	Milk River	9	20/5	7	3	4	990	4	Supplies local utility.
Brooks North-East	Bow Island	14	25/5	10	-	10	960	10	
	Basal Colorado	3	25/5	2	-	2	1000	2	
	Mannville	22	20/5	17	2	15	1030	15	Supplies local utility.
	Detrital	11	15/5	9	-	9	1030	9	
Brown Creek	Mississippian	52	15/10	40	-	40	970	39	Presently considered beyond economic reach.
Burnt River	Peace River	2	10/5	2	-	2	1010	2	Presently considered beyond economic reach.
	Bluesky	9	10/5	8	-	8	1020	8	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
FIELD OR AREA	ZONE	INITIAL GAS IN PLACE BCF	LOSSES RESERVOIR/SURFACE PER CENT	INITIAL MARKETABLE GAS BCF	MARKETABLE GAS PRODUCED TO DEC. 31, 1962 BCF	REMAINING MARKETABLE GAS DEC. 31, 1962 BCF	ESTIMATED HEATING VALUE BTU/CU.FT.	REMAINING MARKETABLE GAS (1000 BTU BASIS) BCF	REMARKS
BURNT TIMBER	MISSISSIPPIAN	170	10/20	120	-	120	1080	130	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
CAMPBELL-NAMAO	BASAL BLAIRMORE ASSOCIATED	29	10/5	25	6	19	1020	19	
	BASAL BLAIRMORE SOLUTION	6	40/20	3	-	3	1020	3	
CARBON	VIKING	7	20/5	5	-	5	1020	5	
	BLAIRMORE	130	10/5	110	2	108	1100	119	
	BASAL BLAIRMORE	3	20/5	2	-	2	1100	2	
	MISSISSIPPIAN	11	10/5	9	-	9	1080	10	
CAROLINE	BASAL BLAIRMORE	19	10/10	15	-	15	1070	16	
CARSON CREEK	BEAVERHILL LAKE	240	10/15	180	-	180	1050	189	
CARSON CREEK NORTH	BEAVERHILL LAKE ASSOCIATED	28	15/15	20	-	20	1100	22	
	BEAVERHILL LAKE SOLUTION	330	35/20	170	-	170	1100	187	
CARSON LAKE	MISSISSIPPIAN	12	10/10	10	-	10	1050	11	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
CARSTAIRS	BASAL BLAIRMORE	5	15/10	4	-	4	1100	4	
	MISSISSIPPIAN	1100	10/10	920	58	862	1100*	948	
CASTOR	VIKING	22	15/5	18	-	18	1040	19	PRESENTLY CONSIDERED
	BLAIRMORE	2	10/5	2	-	2	1070	2	BEYOND ECONOMIC REACH.
CESSFORD	VIKING	200	20/5	150	1	149	1020*	152	
	BASAL COLORADO	1300	20/5	1000	130	870	1020*	887	
	BASAL BLAIRMORE	420	15/5	340	19	321	1020*	327	
CHIGWELL	BLAIRMORE	74	10/10	60	2	58	1100*	64	
CHINOOK RIDGE	PADDY	12	10/10	10	-	10	1020	10	PRESENTLY CONSIDERED
	CADOTTE	31	10/10	25	-	25	1020	26	BEYOND ECONOMIC REACH.
	NOTIKEWIN	19	10/10	15	-	15	1020	15	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
FIELD OR AREA	ZONE	INITIAL GAS IN PLACE BCF	LOSSES RESERVOIR/SURFACE PER CENT	INITIAL MARKETABLE GAS BCF	MARKETABLE GAS PRODUCED TO DEC. 31, 1962 BCF	REMAINING MARKETABLE GAS DEC. 31, 1962 BCF	ESTIMATED HEATING VALUE BTU/CU.FT.	REMAINING MARKETABLE GAS (1000 BTU BASIS) BCF	REMARKS
CHISHOLM	BLAIRMORE	12	10/5	10	-	10	1020	10	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
CLEAR HILLS	GETHING	1	15/5	1	-	1	975	1	PRESENTLY CONSIDERED
	TRIASSIC	8	10/5	7	-	7	1030	7	BEYOND ECONOMIC REACH.
	LEDUC	4	15/5	3	-	3	1070	3	
CLIVE	VIKING	4	20/5	3	-	3	990	3	PRESENTLY CONSIDERED
	BLAIRMORE	7	15/5	6	-	6	1020	6	BEYOND ECONOMIC
	NISKU ASSOCIATED	9	10/15	7	-	7	1150	8	REACH.
	LEDUC ASSOCIATED	5	15/25	3	-	3	1200	4	
COLD LAKE	BLAIRMORE	6	25/5	4	2	2	1000	2	SUPPLIES LOCAL UTILITY.
COMREY	SECOND SPECKS	4	20/5	3	-	3	940	3	
	BOW ISLAND	29	10/5	25	10	15	940	14	
CONNORSVILLE	VIKING	7	15/5	6	-	6	990	6	PRESENTLY CONSIDERED
	BASAL BLAIRMORE	14	15/5	11	-	11	1130	12	BEYOND ECONOMIC REACH.
CONTROL	VIKING	22	15/5	18	-	18	970	17	PRESENTLY CONSIDERED
	BASAL MANNVILLE	20	20/5	15	-	15	1030	15	BEYOND ECONOMIC REACH.
COUNTESS	BOW ISLAND	79	20/5	60	2	58	960*	56	
	BASAL COLORADO	56	25/5	40	6	34	960*	33	
	BASAL BLAIRMORE	8	10/5	7	1	6	960	6	
	MISSISSIPPIAN	2	15/5	2	-	2	960	2	
	MISSISSIPPIAN ASSOCIATED	3	20/10	2	-	2	960	2	
CRAIGEND	GRAND RAPIDS	1	25/5	1	-	1	1000	1	PRESENTLY CONSIDERED
	GROSMONT	140	25/5	100	-	100	995	100	BEYOND ECONOMIC REACH.
CROSSFIELD	BASAL BLAIRMORE	20	15/10	15	-	15	1100	17	
	MISSISSIPPIAN	1900	10/15	1450	49	1401	1080*	1513	
	WABAMUN	1400	15/50	600	7	593	1060*	629	
CROSSFIELD EAST	MISSISSIPPIAN	130	10/15	100	-	100	1120	112	
	WABAMUN	350	15/60	120	-	120	1060	127	
DIXONVILLE	GETHING	12	10/5	10	-	10	1000	10	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
FIELD OR AREA	ZONE	INITIAL GAS IN PLACE BCF	LOSSES RESERVOIR/SURFACE PER CENT	INITIAL MARKETABLE GAS BCF	MARKETABLE GAS PRODUCED TO DEC. 31, 1962 BCF	REMAINING MARKETABLE GAS DEC. 31, 1962 BCF	ESTIMATED HEATING VALUE BTU/CU.FT.	REMAINING MARKETABLE GAS (1000 BTU BASIS) BCF	REMARKS
DONALDA	VIKING	40	20/5	30	-	30	970	29	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
	BASAL BLAIRMORE	5	15/5	4	-	4	970	4	
	DETRITAL	5	20/5	4	-	4	990	4	
DOWLING LAKE	BASAL BLAIRMORE	5	20/5	4	1	3	1150	3	SUPPLIES LOCAL UTILITY.
DRUMHELLER	VIKING	4	25/5	3	-	3	1100	3	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
	BLAIRMORE	18	10/5	15	-	15	1100	17	
DUVERNAY	VIKING	4	20/5	3	1	2	980	2	
DYBERG	BELLY RIVER	3	20/5	2	-	2	950	2	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
	VIKING	8	10/5	7	-	7	1000	7	
	BASAL BLAIRMORE	12	10/5	10	-	10	1020	10	
EAGLESHAM	GETHING	6	15/5	5	-	5	1000	5	
	CADOMIN	7	10/5	6	-	6	1060	6	
	MISSISSIPPIAN	99	10/5	85	-	85	1110	94	
ELK POINT	MANNVILLE	4	25/5	3	1	2	990	2	SUPPLIES LOCAL UTILITY.
ENCHANT	MILK RIVER	8	30/5	5	-	5	1030	5	
	BOW ISLAND	25	25/5	18	-	18	1030	19	
	BASAL BLAIRMORE	10	20/10	7	-	7	1030	7	
	ELLIS	3	25/10	2	-	2	1030	2	
	MISSISSIPPIAN	5	15/10	4	-	4	1030	4	
ERSKINE	VIKING BLAIRMORE ASSOCIATED	4	20/5	3	-	3	1040	3	
	LEDUC ASSOCIATED	20	15/10	15	-	15	1090	16	
	LEDUC SOLUTION	31	10/20	22	-	22	1070	24	
		19	35/60	5	-	5	1110	6	
ESTHER	VICTORIA	23	30/5	15	-	15	990	15	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
ETZIKOM	BOW ISLAND	79	20/5	60	21	39	930	36	
	BASAL BLAIRMORE	1	25/5	1	-	1	1010	1	
EXCELSIOR	VIKING BASAL BLAIRMORE ASSOCIATED	9	15/5	7	-	7	1000	7	
		39	10/5	33	-	33	970	32	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
FIELD OR AREA	ZONE	INITIAL GAS IN PLACE BCF	LOSSES RESERVOIR/SURFACE PER CENT	INITIAL MARKETABLE GAS BCF	MARKETABLE GAS PRODUCED TO DEC. 31, 1962 BCF	REMAINING MARKETABLE GAS DEC. 31, 1962 BCF	ESTIMATED HEATING VALUE BTU/CU.FT.	REMAINING MARKETABLE GAS (1000 BTU BASIS) BCF	REMARKS
EYREMORE	BOW ISLAND	15	30/5	10	-	10	960	10	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
FAIRYDELL-BON ACCORD	VIKING	130	20/5	100	10	90	1020	92	
	BASAL BLAIRMORE	19	15/5	15	-	15	1000	15	
FAUST SOUTH	GETHING	12	10/5	10	-	10	990	10	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
FENN-BIG VALLEY	VIKING	29	20/5	22	3	19	1000	19	
	DETRITAL	12	20/5	9	-	9	1050	9	
	NISKU SOLUTION	150	45/35	53	15	38	1110	42	
	LEDUC ASSOCIATED AND SOLUTION	11	35/45	4	1	3	1110	3	
FIGURE LAKE	VIKING	6	25/5	4	-	4	960	4	PRESENTLY CONSIDERED
	BLAIRMORE	11	15/5	9	-	9	1000	9	BEYOND ECONOMIC REACH.
	NISKU	19	15/5	15	-	15	1000	15	
FOREMOST	BOW ISLAND	33	15/5	27	6	21	950	20	
FORT KENT	BLAIRMORE	5	20/5	4	1	3	980	3	SUPPLIES LOCAL UTILITY.
FORT SASKATCHEWAN	VIKING	220	10/5	190	50	140	1000	140	
FOX CREEK	VIKING	6	15/5	5	-	5	1160	6	PRESENTLY CONSIDERED
	GETHING	1	25/5	1	-	1	1160	1	BEYOND ECONOMIC REACH.
	TRIASSIC	5	15/10	4	-	4	1160	5	
FOX CREEK WEST	GETHING	5	10/5	4	-	4	1020	4	
	NISKU	18	10/20	13	-	13	1240	16	
GARRINGTON	VIKING	24	20/10	17	-	17	1000	17	
	BLAIRMORE	1	25/10	1	-	1	1010	1	
	LEDUC	35	10/20	25	-	25	1020	26	
GHOST PINE	BLAIRMORE	37	10/10	30	-	30	1010	30	PRESENTLY CONSIDERED
	BLAIRMORE ASSOCIATED	8	20/10	6	-	6	1050	6	BEYOND ECONOMIC REACH.
	MISSISSIPPIAN	3	15/10	2	-	2	1070	2	

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FIELD OR AREA	ZONE	INITIAL GAS IN PLACE BCF	LOSSES RESERVOIR/SURFACE PER CENT	INITIAL MARKETABLE GAS BCF	MARKETABLE GAS PRODUCED TO DEC. 31, 1962 BCF	REMAINING MARKETABLE GAS DEC. 31, 1962 BCF	ESTIMATED HEATING VALUE BTU/CU.FT.	REMAINING MARKETABLE GAS (1000 BTU BASIS) BCF	REMARKS
GILBY	VIKING	4	20/5	3	-	3	1220	4	
	BASAL BLAIRMORE	130	10/15	100	1	99	1160	115	
	JURASSIC	200	10/15	150	-	150	1020	153	
	PEKISKO	270	10/15	210	12	198	1080	214	
	BANFF	4	20/15	3	-	3	1100	3	
	WABAMUN	7	10/20	5	-	5	1170	6	
GLEN PARK	BASAL BLAIRMORE	9	15/5	7	1	6	1140	7	
	LEDUC SOLUTION	16	40/20	8	1	7	1250	9	
GOLDEN SPIKE	VIKING	4	20/5	3	1	2	1050	2	
	BLAIRMORE	22	10/5	19	1	18	1050	19	
	WABAMUN	26	10/15	20	5	15	1060	16	
	NISKU ASSOCIATED	4	10/15	3	-	3	1220	4	
	NISKU SOLUTION	6	35/20	3	1	2	1220	2	
	LEDUC SOLUTION	100	25/30	50	-17	67	1290	86	
GOODWIN LAKE	VIKING	4	20/5	3	-	3	1020	3	PRESENTLY CONSIDERED
	NORDEGG	31	10/10	25	-	25	1070	27	BEYOND ECONOMIC REACH.
GORDONDALE	PADDY	53	15/5	43	17	26	1000	26	
	NOTIKEWIN	4	20/5	3	-	3	1020	3	
	GETHING	68	15/5	55	22	33	1050	35	
GREENCOURT	NORDEGG	37	25/10	25	-	25	1070	27	PRESENTLY CONSIDERED
	MISSISSIPPIAN	37	25/10	25	-	25	1130	28	BEYOND ECONOMIC REACH.
HACKETT	BASAL BLAIRMORE	37	10/10	30	-	30	1100	33	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
HAIRY HILL	VIKING	1	25/5	1	-	1	980	1	SUPPLIES LOCAL UTILITY.
	BLAIRMORE	23	10/5	20	5	15	1000	15	
HAMELIN CREEK	CADOTTE	3	20/5	2	-	2	1000	2	
	GETHING	4	15/5	3	-	3	1010	3	
	CADOMIN	21	15/5	17	3	14	1060	15	SUPPLIES LOCAL UTILITY.
HAMILTON LAKE	VIKING NON-ASSOCIATED AND ASSOCIATED	12	15/5	10	-	10	1040	10	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.

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FIELD OR AREA	ZONE	INITIAL GAS IN PLACE BCF	LOSSES RESERVOIR/SURFACE PER CENT	INITIAL MARKETABLE GAS BCF	MARKETABLE GAS PRODUCED TO DEC. 31, 1962 BCF	REMAINING MARKETABLE GAS DEC. 31, 1962 BCF	ESTIMATED HEATING VALUE BTU/CU.FT.	REMAINING MARKETABLE GAS (1000 BTU BASIS) BCF	REMARKS
HARMATTAN-EAST	BLAIRMORE	4	20/10	3	-	3	1020	3	
	MISSISSIPPIAN ASSOCIATED	1200	10/15	900	-1	901	1080	973	
	MISSISSIPPIAN SOLUTION	150	35/20	80	2	78	1280	100	
HARMATTAN-ELKTON	MISSISSIPPIAN	69	10/20	50	-	50	1040	52	
	MISSISSIPPIAN ASSOCIATED	1300	10/20	950	-8	958	1080	1035	
	MISSISSIPPIAN SOLUTION	170	35/20	88	9	79	1280	101	
	LEDUC	83	10/60	30	-	30	1100	33	
HEART RIVER	CADOTTE	2	15/5	2	-	2	1000	2	SUPPLIES LOCAL UTILITY.
	NOTIKEWIN	2	10/5	2	-	2	1000	2	
HERCULES	VIKING	19	15/5	15	-	15	1050	16	PRESENTLY CONSIDERED
	BLAIRMORE	29	10/5	25	-	25	960	24	BEYOND ECONOMIC REACH.
HOLBORNE	CARDIUM	6	25/5	4	-	4	980	4	PRESENTLY CONSIDERED
	BLAIRMORE	25	20/10	18	-	18	1120	20	BEYOND ECONOMIC REACH.
HOLMBERG	BLAIRMORE	25	15/5	20	-	20	1050	21	
HOMEGLEN-RIMBEY	LEDUC	10	10/15	8	-	8	1080	9	
	LEDUC ASSOCIATED AND SOLUTION	1000	10/15	790	28	762	1080	823	
HUNTER VALLEY	MISSISSIPPIAN	140	10/20	100	-	100	1080	108	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
HUSSAR	BELLY RIVER	6	30/5	4	-	4	1000	4	
	VIKING	56	25/5	40	1	39	1040	41	
	BASAL COLORADO	130	20/5	100	16	84	1040*	87	
	BLAIRMORE	480	10/5	410	30	380	1040*	395	
INLAND	VIKING	21	25/5	15	-	15	980	15	
INNISFAIL	MISSISSIPPIAN	22	10/10	18	-	18	1080	19	
	WABAMUN	4	15/15	3	-	3	1170	4	
	LEDUC ASSOCIATED	17	10/35	10	-	10	1020	10	
	LEDUC SOLUTION	210	40/40	75	5	70	1110*	78	

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JACKFISH	DUNVEGAN	12	10/5	10	-	10	1140	11	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
JARVIE	VIKING	9	20/5	7	-	7	1040	7	PRESENTLY CONSIDERED
	BLAIRMORE	7	10/5	6	-	6	1100	7	BEYOND ECONOMIC REACH.
JENNER	BOW ISLAND	4	25/5	3	-	3	990	3	PRESENTLY CONSIDERED
	BASAL COLORADO	11	10/5	9	-	9	1040	9	BEYOND ECONOMIC REACH.
	BLAIRMORE	11	15/5	9	-	9	1050	9	
JOARCAM	VIKING ASSOCIATED	66	20/5	50	-	50	1040	52	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
JOFFRE	VIKING	1	25/5	1	-	1	1000	1	PRESENTLY CONSIDERED
	BASAL BLAIRMORE	26	20/5	20	-	20	1020	20	BEYOND ECONOMIC REACH.
	NISKU SOLUTION	100	40/40	36	-	36	1260	45	
JUDY CREEK	VIKING	13	20/5	10	-	10	1020	10	
	BEAVERHILL LAKE SOLUTION	630	55/30	200	-	200	1120	224	
JUMPING POUND	MISSISSIPPIAN	820	15/17	580	160	420	1050	441	
KAYBOB	NOTIKEWIN	250	15/5	200	7	193	1020	197	
	GETHING	6	10/5	5	-	5	1050	5	
	CADOMIN	86	10/10	70	-	70	1040	73	
	WINTERBURN	5	15/35	3	-	3	1070	3	
	BEAVERHILL LAKE SOLUTION	210	35/25	100	-	100	1140	114	
KESSLER	VIKING	70	25/5	50	1	49	990	49	
	MANNVILLE	5	10/5	4	-	4	990	4	
KEVISVILLE	MISSISSIPPIAN	1	20/10	1	-	1	1000	1	PRESENTLY CONSIDERED
	LEDUC	14	10/20	10	-	10	980	10	BEYOND ECONOMIC REACH.
KILLAM	VIKING	4	25/5	3	-	3	1040	3	PRESENTLY CONSIDERED
	BLAIRMORE	9	15/5	7	-	7	1000	7	BEYOND ECONOMIC REACH.
KIRKCALDY	BASAL MANNVILLE	20	20/5	15	-	15	1000	15	PRESENTLY CONSIDERED
	MISSISSIPPIAN	39	15/10	30	-	30	1010	30	BEYOND ECONOMIC REACH.

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KNELLER	BLAIRMORE	12	10/5	10	-	10	1100	11	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
LAC LA BICHE	VIKING	14	25/5	10	-	10	1010	10	
	BLAIRMORE	17	20/5	13	-	13	1010	13	SUPPLIES LOCAL UTILITY.
LAMBERT CREEK	WABAMUN	15	25/10	10	-	10	1050	11	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
LEAHURST	BLAIRMORE	9	10/5	8	1	7	1100	8	SUPPLIES LOCAL UTILITY.
LEDUC-WOODBEND	VIKING	20	20/5	15	2	13	1070	14	
	BASAL BLAIRMORE	85	20/5	65	6	59	1180	70	14 BCF CONSIDERED BEYOND ECONOMIC REACH.
	NISKU ASSOCIATED	37	10/15	28	-2	30	1180	35	
	NISKU SOLUTION	140	25/30	72	45	27	1180	32	
	LEDUC ASSOCIATED	420	15/15	300	-9	309	1180	365	
	LEDUC SOLUTION	230	50/30	80	58	22	1180	26	
LINDBERGH	VIKING	3	35/5	2	-	2	990	2	
	BLAIRMORE	18	20/5	14	4	10	1100	11	
LLOYDMINSTER	BLAIRMORE	40	50/30	14	11	3	950	3	SUPPLIES LOCAL UTILITY.
LONE PINE CREEK	BASAL BLAIRMORE	4	10/10	3	-	3	1020	3	
	WABAMUN	160	20/20	100	-	100	1030	103	
LOOKOUT BUTTE	MISSISSIPPIAN	550	15/15	400	-	400	1040	416	
LOVETT	BLAIRMORE	12	10/5	10	-	10	1040	10	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
	RUNDLE	86	10/10	70	-	70	1040	73	
MAJEAU LAKE	BLAIRMORE	3	20/5	2	-	2	1000	2	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
	RUNDLE	12	10/10	10	-	10	1070	11	
MANYBERRIES	BOW ISLAND	42	20/5	32	15	17	940	16	
MARTEN HILLS	WABISKAW	28	25/5	20	-	20	990	20	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
	WABAMUN	70	25/5	50	-	50	995	50	
MAZEPPA	MISSISSIPPIAN	20	10/15	15	-	15	1060	16	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.

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MEDICINE HAT	MEDICINE HAT	2500	25/5	1750	280	1470	950*	1397	
	BOW ISLAND	20	20/5	15	-	15	970	15	
	ELLIS	25	15/5	20	-	20	1000	20	
MEDICINE RIVER	BLAIRMORE	15	25/10	10	-	10	1150	12	PRESENTLY CONSIDERED
	JURASSIC ASSOCIATED	5	15/10	4	-	4	1020	4	BEYOND ECONOMIC REACH.
MILLET	BLAIRMORE	21	20/10	15	-	15	1020	15	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
MINNEHIK-BUCK LAKE	BLAIRMORE	6	25/5	4	-	4	1000	4	
	MISSISSIPPIAN	650	10/15	500	11	489	1090	533	
MOOSE MOUNTAIN	MISSISSIPPIAN	67	10/25	45	-	45	1000	45	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
MORINVILLE	VIKING	3	25/5	2	-	2	1000	2	
	BLAIRMORE	140	15/5	110	32	78	1070*	83	
MORLEYVILLE	MISSISSIPPIAN	69	10/20	50	-	50	1050	53	
MOUNTAIN PARK	TRIASSIC	29	10/5	25	-	25	1090	27	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
NEVIS	BLAIRMORE	65	15/10	50	-	50	1000	50	
	DEVONIAN	740	10/20	530	43	487	990*	482	
NORDEGG	TRIASSIC	9	10/10	7	-	7	1000	7	PRESENTLY CONSIDERED
	MISSISSIPPIAN	25	10/10	20	-	20	1000	20	BEYOND ECONOMIC REACH.
NORMANDVILLE	GETHING	15	15/5	12	-	12	980	12	
	TRIASSIC	4	15/5	3	-	3	1090	3	
	MISSISSIPPIAN	31	15/5	25	1	24	1050	25	SUPPLIES LOCAL UTILITY.
OBED	MISSISSIPPIAN	12	10/10	10	-	10	1040	10	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
OBERLIN	BLAIRMORE	3	20/5	2	1	1	1090	1	SUPPLIES LOCAL UTILITY.
OKOTOKS	WABAMUN	420	10/60	150	14	136	1000	136	

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Olds	Wabamun	190	10/20	140	-	140	1050	147	
Oyen	Viking	29	20/5	22	2	20	960*	19	
Paddle River	Jurassic	190	25/10	130	-	130	1070	139	
	Mississippian	30	25/10	20	-	20	1060	21	
Pakowki Lake	Bow Island	14	25/5	10	2	8	940	8	
Parkland	Mississippian	26	10/15	20	1	19	1010	19	
Pembina	Belly River	94	10/5	80	-	80	1180	94	
	Belly River Solution	48	40/65	10	-	10	1180	12	
	Cardium Solution	3100	60/35	800	90	710	1170	831	
	Viking	11	10/5	9	-	9	1100	10	
	Blairmore	210	10/10	170	4	166	1120	186	
	Nordegg	18	10/5	15	-	15	1050	16	
	Mississippian	13	10/15	10	-	10	1050	11	
Pendant d'Oreille	Bow Island	180	20/5	140	68	72	940	68	
	Mannville	25	15/5	20	2	18	1000	18	
Penhold	Viking	14	10/5	12	-	12	1020	12	Presently considered beyond economic reach.
Phil Can	Gething	12	20/5	9	-	9	980	9	Presently considered
	Mississippian	5	15/5	4	-	4	1050	4	beyond economic reach.
Pincher Creek	Mississippian	1800	25/25	1000	130	870	1030*	896	
Pine Creek	Wabamun	100	10/50	45	-	45	1050*	47	
	Leduc	1400	10/40	750	10	740	1050*	777	
Plain Lake	Viking	3	25/5	2	-	2	980	2	Presently considered
	Blairmore	28	20/5	21	-	21	1000	21	beyond economic reach.
Pouce Coupe	Peace River	140	15/5	110	51	59	1000	59	
	Cadomin	12	15/5	10	-	10	1060	11	

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Pouce Coupe South	Peace River	110	15/5	90	34	56	1040	58	
	Cadomin	15	15/5	12	2	10	1060	11	
	Gething	14	10/5	12	6	6	1000	6	
	Jurassic	1	25/10	1	-	1	1070	1	
	Triassic	25	15/5	20	-	20	1090	22	
Prevo	Mississippian	37	10/10	30	2	28	1100	31	
Princess	Bow Island	7	20/5	5	-	5	1010	5	
	Basal Colorado	39	20/5	30	1	29	1010*	29	
	Basal Blairmore	160	15/5	130	10	120	1010*	121	
	Mississippian	8	20/5	6	-	6	1030	6	
	Jefferson	44	20/15	30	-	30	1030	31	
Provost	Viking	710	20/5	540	84	456	1000*	456	
	Blairmore	19	15/5	15	-	15	1000	15	
Raven River	Viking	19	25/10	13	-	13	1020	13	
	Basal Blairmore	4	15/10	3	-	3	1050	3	
	Mississippian	26	10/15	20	-	20	1070	21	
Redland	Viking	19	15/5	15	-	15	1000	15	
	Blairmore	20	20/5	15	-	15	1050	16	
Redwater	Viking	14	25/5	10	-	10	1040	10	
	Leduc Solution	220	40/65	46	6	40	1220	49	
Red Willow	Viking	13	20/5	10	-	10	1020	10	Presently considered beyond economic reach.
	Basal Blairmore	8	20/10	6	-	6	1100	7	
Retlaw	Bow Island	3	25/5	2	-	2	950	2	
	Blairmore	53	20/10	38	-	38	1000	38	
Rich	Basal Blairmore	16	15/10	12	-	12	1100	13	Presently considered beyond economic reach.
Richdale	Viking	14	25/5	10	-	10	1010	10	Presently considered beyond economic reach.
	Basal Blairmore	11	25/5	8	-	8	1050	8	
Rochester	Viking	5	20/5	4	-	4	1000	4	Presently considered beyond economic reach.
	Blairmore	27	25/5	19	-	19	1000	19	
	Wabamun	6	10/5	5	-	5	1070	5	

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RODNEY	MISSISSIPPIAN	12	10/10	10	-	10	1040	10	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
ROLLING HILLS	BOW ISLAND	31	15/5	25	-	25	970	24	PRESENTLY CONSIDERED
	BASAL COLORADO	12	15/5	10	-	10	1030	10	BEYOND ECONOMIC REACH.
ROSEBUD	VIKING	31	15/5	25	-	25	1000	25	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
ROWLEY	VIKING	29	10/5	25	-	25	1040	26	PRESENTLY CONSIDERED
	MANNVILLE	9	10/5	8	-	8	1050	8	BEYOND ECONOMIC REACH.
	MISSISSIPPIAN ASSOCIATED	49	10/10	40	-	40	1080	43	
RYCROFT	GETHING	16	15/5	13	2	11	1040	11	SUPPLIES LOCAL UTILITY.
ST. ALBERT-BIG LAKE	VIKING	3	20/5	2	-	2	1070*	2	
	BLAIRMORE	150	15/5	120	43	77	1070*	82	
ST. BRIDES	BLAIRMORE	26	20/5	20	-	20	940	19	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
ST. PAUL	BLAIRMORE	3	20/5	4	2	2	1010	2	SUPPLIES LOCAL UTILITY.
SADDLE HILLS	PEACE RIVER	41	10/5	35	-	35	1020	36	
	GETHING	4	15/5	3	-	3	980	3	
	PERMO-PENN	23	10/5	20	-	20	1030	21	
SAMSON	BASAL BLAIRMORE ASSOCIATED AND NON-ASSOCIATED	19	20/10	14	3	11	1040	11	
SARCEE	MISSISSIPPIAN	180	10/20	130	5	125	1050	131	
SAVANNA CREEK	MISSISSIPPIAN	590	10/25	400	5	395	1020	403	
SEDALIA	VIKING	130	20/5	100	1	99	1010*	100	
	BLAIRMORE	1	25/5	1	-	1	1010	1	
SIBBALD	VIKING	59	20/5	45	4	41	960*	39	
	BASAL COLORADO	13	20/5	10	-	10	970	10	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
FIELD OR AREA	ZONE	INITIAL GAS IN PLACE BCF	LOSSES RESERVOIR/SURFACE PER CENT	INITIAL MARKETABLE GAS BCF	MARKETABLE GAS PRODUCED TO DEC. 31, 1962 BCF	REMAINING MARKETABLE GAS DEC. 31, 1962 BCF	ESTIMATED HEATING VALUE BTU/CU.FT.	REMAINING MARKETABLE GAS (1000 BTU BASIS) BCF	REMARKS
SIEU RIVER	BLAIRMORE	12	15/5	10	-	10	1000	10	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
SIMONETTE	CADOMIN	20	15/10	15	-	15	1060	16	
	WABAMUN	140	10/35	80	-	80	1070	86	
	LEDUC SOLUTION	280	50/35	90	-	90	1020	92	
SMITH COULEE	BOW ISLAND	49	25/5	35	12	23	930	21	
STEEN RIVER	SLAVE POINT	13	10/15	10	-	10	1070	11	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
STEEP CREEK	GETHING	6	15/5	5	-	5	1020	5	PRESENTLY CONSIDERED
	TRIASSIC	7	15/10	5	-	5	1030	5	BEYOND ECONOMIC REACH.
	PERMO-PENN	12	10/10	10	-	10	1030	10	
STETTLER	VIKING	4	25/5	3	-	3	1020	3	
	NISKU SOLUTION	26	45/45	8	2	6	1130	7	
	LEDUC SOLUTION	10	45/45	3	1	2	1140	2	
STOLBERG	MISSISSIPPIAN	86	10/10	70	-	70	1040	73	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
STRATHMORE	BELLY RIVER	7	20/5	5	-	5	1000	5	
	VIKING	7	20/5	5	-	5	1000	5	
STURGEON LAKE SOUTH	GETHING	16	15/5	13	-	13	1000	13	
	CADOMIN	11	15/5	9	-	9	1060	10	
	TRIASSIC ASSOCIATED	5	10/5	4	-	4	1180	5	
	TRIASSIC SOLUTION	28	35/35	12	-	12	1180	14	
	WABAMUN	7	10/25	5	-	5	1070	5	
	LEDUC ASSOCIATED	7	10/25	5	-	5	1080	5	
	LEDUC SOLUTION	170	35/30	77	6	71	1080	77	
STURGEON LAKE SOUTH GENERAL AREA	GETHING	80	15/5	65	-	65	1000	65	PRESENTLY CONSIDERED
	CADOMIN	31	15/5	25	-	25	1060	27	BEYOND ECONOMIC REACH.
	TRIASSIC	6	15/5	5	-	5	1180	6	
	PERMO-PENN	3	20/5	2	-	2	1030	2	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
FIELD OR AREA	ZONE	INITIAL GAS IN PLACE BCF	LOSSES RESERVOIR/SURFACE PER CENT	INITIAL MARKETABLE GAS BCF	MARKETABLE GAS PRODUCED TO DEC. 31, 1962 BCF	REMAINING MARKETABLE GAS DEC. 31, 1962 BCF	ESTIMATED HEATING VALUE BTU/CU.FT.	REMAINING MARKETABLE GAS (1000 BTU BASIS) BCF	REMARKS
SUFFIELD	MILK RIVER	32	25/5	23	3	20	960	19	SUPPLIES LOCAL UTILITY.
SUNDRE	VIKING	35	20/10	25	-	25	1020	26	
	BASAL BLAIRMORE	33	15/10	25	-	25	1020	26	
	MISSISSIPPIAN	15	20/15	10	-	10	1070	11	
	MISSISSIPPIAN ASSOCIATED	20	10/15	15	-2	17	1070	18	
	MISSISSIPPIAN SOLUTION	63	40/20	30	3	27	1100	30	
SWAN HILLS	GETHING	1	10/5	1	-	1	1050	1	
	BEAVERHILL LAKE SOLUTION	1200	55/30	380	-	380	1120	426	
SYLVAN LAKE	EDMONTON	2	15/5	2	-	2	1000	2	
	BLAIRMORE	220	10/10	180	-	180	1100	198	
	JURASSIC	11	20/10	8	-	8	1020	8	
	MISSISSIPPIAN	39	15/10	30	-	30	1100	33	
	LEDUC	25	10/10	20	-	20	1020	20	
TANGENT	CADOTTE	15	30/5	10	-	10	1010	10	
	GETHING	140	15/5	110	-	110	1000	110	
	TRIASSIC	66	20/5	50	-	50	1180	59	
THREE HILLS CREEK	BASAL BELLY RIVER	9	15/5	7	-	7	970	7	
	VIKING	8	20/5	6	-	6	1000	6	
	MISSISSIPPIAN	210	10/10	170	3	167	1100*	184	
TONY CREEK	VIKING	15	15/5	12	-	12	1100	13	
	CADOMIN	18	10/5	15	-	15	1040	16	
	TRIASSIC	3	20/5	2	-	2	1160	2	
	NISKU	1	20/5	1	-	1	1240	1	
	BEAVERHILL LAKE	24	10/30	15	-	15	1210	18	
TURIN	BOW ISLAND	11	20/5	8	-	8	970	8	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
	BASAL BLAIRMORE	21	10/5	18	-	18	1020	18	
	ELLIS	5	15/5	4	-	4	1070	4	
	MISSISSIPPIAN	3	15/10	2	-	2	1050	2	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
FIELD OR AREA	ZONE	INITIAL GAS IN PLACE BCF	LOSSES RESERVOIR/SURFACE PER CENT	INITIAL MARKETABLE GAS BCF	MARKETABLE GAS PRODUCED TO DEC. 31, 1962 BCF	REMAINING MARKETABLE GAS DEC. 31, 1962 BCF	ESTIMATED HEATING VALUE BTU/CU.FT.	REMAINING MARKETABLE GAS (1000 BTU BASIS) BCF	REMARKS
TURNER VALLEY	MISSISSIPPIAN ASSOCIATED	1500	10/70	410	250	160	1110	178	
	MISSISSIPPIAN SOLUTION	1400	45/55	350	260	90	1110	100	
TWO CREEK	TRIASSIC	12	10/5	10	-	10	1090	11	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
USONA	BLAIRMORE	12	10/5	10	-	10	1110	11	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
VERGER	BASAL COLORADO	6	10/5	5	-	5	1060	5	
	BASAL MANNVILLE	20	20/5	15	-	15	1050	16	
	MISSISSIPPIAN	12	10/10	10	-	10	1070	11	
VIKING-KINSELLA	VIKING	1100	25/5	770	336	434	990	430	
	BLAIRMORE	29	20/5	22	7	15	1000	15	
	DEVONIAN	11	20/5	8	1	7	1010	7	
VIRGINIA HILLS	BLAIRMORE	9	10/5	8	-	8	1040	8	
	TRIASSIC	20	15/10	15	-	15	1160	17	
	BEAVERHILL LAKE SOLUTION	210	55/35	62	-	62	1120	69	
	SLAVE POINT	3	25/20	2	-	2	1070	2	
WAINWRIGHT	VIKING	5	15/5	4	-	4	980	4	
	BLAIRMORE ASSOCIATED AND NON-ASSOCIATED	33	20/5	25	7	18	940	17	
WAIPAROUS CREEK	MISSISSIPPIAN	69	10/20	50	-	50	1070	54	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
WASKAHIGAN	DUNVEGAN	25	10/10	20	-	20	1100	22	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
WATERGLEN	BLAIRMORE	7	15/10	5	-	5	1100	6	PRESENTLY CONSIDERED
	LEDUC	10	10/20	7	-	7	1100	8	BEYOND ECONOMIC REACH.
WATERTON	MISSISSIPPIAN	1600	15/50	700	11	689	1020	703	
	DEVONIAN	280	10/20	200	2	198	1020	202	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
FIELD OR AREA	ZONE	INITIAL GAS IN PLACE BCF	LOSSES RESERVOIR/SURFACE PER CENT	INITIAL MARKETABLE GAS BCF	MARKETABLE GAS PRODUCED TO DEC. 31, 1962 BCF	REMAINING MARKETABLE GAS DEC. 31, 1962 BCF	ESTIMATED HEATING VALUE BTU/CU.FT.	REMAINING MARKETABLE GAS (1000 BTU BASIS) BCF	REMARKS
WATTS	VIKING	3	20/5	2	1	1	1040	1	SUPPLIES LOCAL UTILITY.
	MISSISSIPPIAN	1	20/5	1	-	1	1070	1	
WAYNE-ROSEDALE	BELLY RIVER	7	20/5	5	-	5	1000	5	
	VIKING	170	20/5	130	4	126	1100*	139	
	BLAIRMORE	220	15/5	180	6	174	1100*	191	
WEST DRUMHELLER	BASAL BLAIRMORE	12	15/5	10	-	10	1100	11	PRESENTLY CONSIDERED
	NISKU ASSOCIATED	9	10/15	7	-	7	1090	8	BEYOND ECONOMIC REACH.
WESTEROSE	BLAIRMORE	7	20/5	5	-	5	1020	5	
	LEDUC ASSOCIATED	130	10/20	90	-6	96	1070	103	
	LEDUC SOLUTION	130	30/20	73	6	67	1100	74	
WESTEROSE SOUTH	WABAMUN	7	10/10	6	-	6	1090	7	
	LEDUC	1700	10/15	1300	74	1226	1090	1336	
WESTLOCK	VIKING	310	15/5	250	3	247	1040	257	SUPPLIES LOCAL UTILITY.
	BASAL BLAIRMORE	4	20/5	3	-	3	1100	3	
WEST PRAIRIE	CADOTTE	18	10/5	15	-	15	1040	16	PRESENTLY CONSIDERED
	BLUESKY	6	10/5	5	-	5	990	5	BEYOND ECONOMIC REACH.
WESTWARD HO	VIKING	11	20/10	8	-	8	1020	8	
	BLAIRMORE	4	20/10	3	-	3	1020	3	
	MISSISSIPPIAN SOLUTION	28	35/45	10	-	10	1130	11	
WHITELAW	GETHING	31	15/5	25	4	21	1020	21	SUPPLIES LOCAL UTILITY.
	TRIASSIC	33	20/5	25	-	25	1090	27	
WILDCAT HILLS	MISSISSIPPIAN	830	10/20	600	13	587	1080	634	
WILDHORSE CREEK	MISSISSIPPIAN	130	10/15	100	-	100	940	94	
WILDMERE	BLAIRMORE	22	20/5	17	8	9	960	9	
WILDUNN CREEK	VIKING	28	25/5	20	-	20	1010	20	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
FIELD OR AREA	ZONE	INITIAL GAS IN PLACE BCF	LOSSES RESERVOIR/SURFACE PER CENT	INITIAL MARKETABLE GAS BCF	MARKETABLE GAS PRODUCED TO DEC. 31, 1962 BCF	REMAINING MARKETABLE GAS DEC. 31, 1962 BCF	ESTIMATED HEATING VALUE BTU/CU.FT.	REMAINING MARKETABLE GAS (1000 BTU BASIS) BCF	REMARKS
WILLESDEN GREEN	BELLY RIVER	4	20/5	3	-	3	1000	3	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
	CARDIUM	12	20/5	9	-	9	1100	10	
	CARDIUM SOLUTION	150	50/35	50	-	50	1160	58	
	BASAL BLAIRMORE	20	10/15	15	-	15	1100	17	
WILLINGDON	VIKING	3	25/5	2	-	2	980	2	
	MANNVILLE	15	25/5	11	1	10	990	10	
	LEDUC	11	10/5	9	3	6	990	6	
WIMBORNE	VIKING	1	25/5	1	-	1	1020	1	
	MISSISSIPPIAN	1	10/10	1	-	1	1100	1	
	NISKU	3	20/15	2	-	2	1160	2	
	LEDUC ASSOCIATED	290	10/30	180	-	180	1000	180	
	LEDUC SOLUTION	73	45/65	14	-	14	1000	14	
WINDFALL	VIKING	13	25/5	9	-	9	1030	9	
	MISSISSIPPIAN	5	15/5	4	-	4	1040	4	
	LEDUC	700	10/35	410	12	398	1050*	418	
WIZARD LAKE	VIKING	1	15/5	1	-	1	1070	1	
	BLAIRMORE	18	20/15	12	6	6	1120	7	
	LEDUC SOLUTION	220	40/25	100	11	89	1250	111	
WOKING	PEACE RIVER	5	10/5	4	-	4	1040	4	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
	SPIRIT RIVER	3	20/5	2	-	2	1040	2	
	BLUESKY	4	20/5	3	-	3	1040	3	
	PERMO-PENN	3	20/5	2	-	2	1060	2	
	MISSISSIPPIAN	3	25/5	2	-	2	1070	2	
WOLF LAKE	CADOMIN	13	10/5	11	-	11	1060	12	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.
WOOD RIVER	BASAL BLAIRMORE	37	10/10	30	1	29	1090*	32	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
FIELD OR AREA	ZONE	INITIAL GAS IN PLACE BCF	LOSSES RESERVOIR/SURFACE PER CENT	INITIAL MARKETABLE GAS BCF	MARKETABLE GAS PRODUCED TO DEC. 31, 1962 BCF	REMAINING MARKETABLE GAS DEC. 31, 1962 BCF	ESTIMATED HEATING VALUE BTU/CU.FT.	REMAINING MARKETABLE GAS (1000 BTU BASIS) BCF	REMARKS
WORSLEY	LEDUC	270	15/5	220	2	218	1070	233	
WITHIN ECONOMIC REACH						28,906		30,594	
BEYOND ECONOMIC REACH						2,643		2,760	
OTHER RESERVES	(WITHIN ECONOMIC REACH)					44		47	
LESS THAN 10 BCF	(BEYOND ECONOMIC REACH)					850		897	
	TOTAL RESERVES, DECEMBER 31, 1962			35,456	3,013	32,443		34,298	

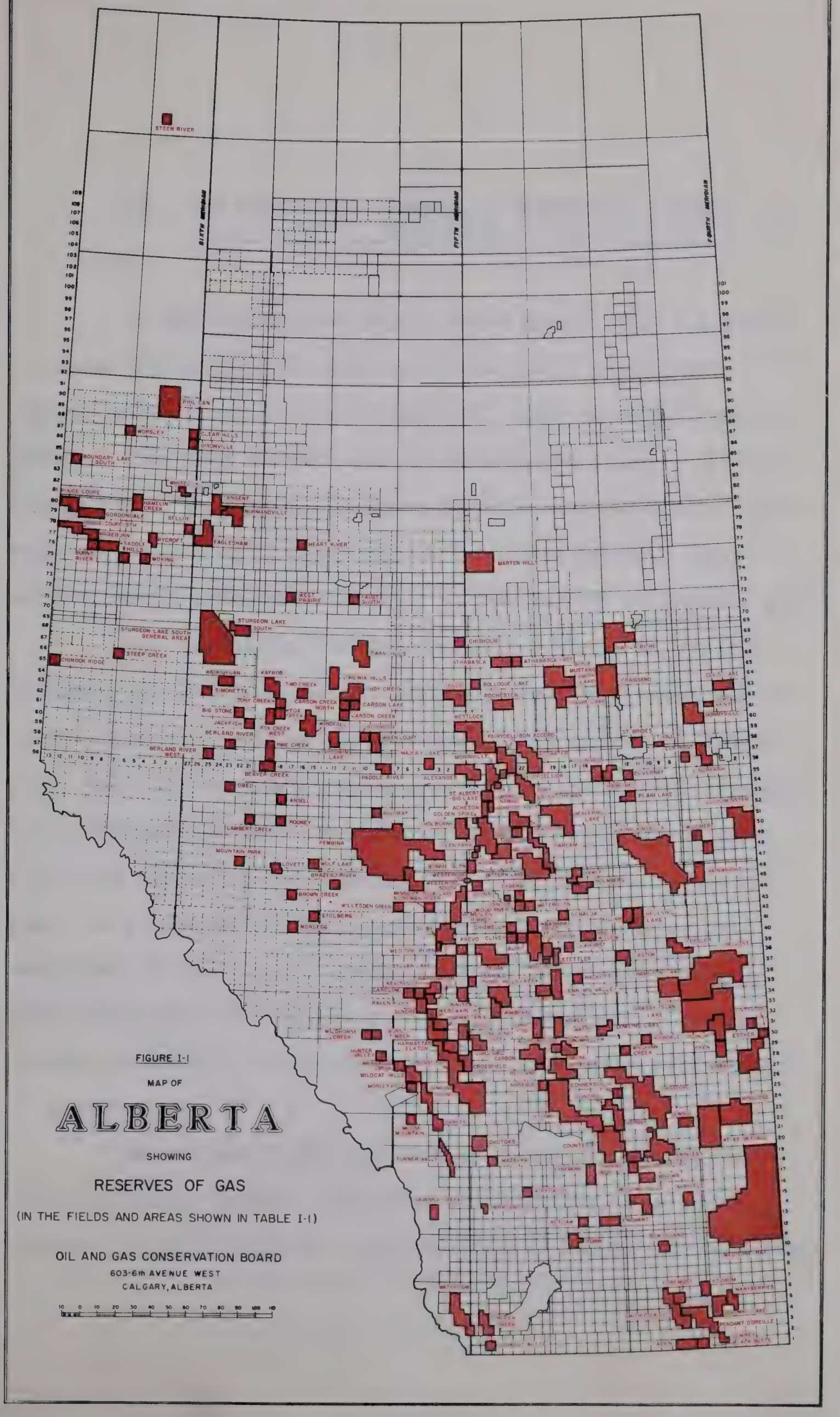
* MEASURED HIGHER HEATING VALUE.

GENERAL NOTES:

1. RESERVOIR LOSS IS CALCULATED AS 10% OF ORIGINAL GAS IN PLACE EXCEPT IN PARTICULAR CASES WHERE THE FOLLOWING LOSSES PERTAIN:

SAND THICKNESS (FEET)	RESERVOIR LOSS (PER CENT)
10 - 15	15
5 - 10	20
0 - 5	25

2. SURFACE LOSSES TAKEN AS 5% FOR ALL DRY GAS, AND VARIES FOR WET AND SOUR GAS DEPENDING UPON ITS COMPOSITION.


STEEN RIVER
SIXTH MERIDIAN
FIFTH MERIDIAN
FOURTH MERIDIAN
PHIL CAN
WORSLEY
CLEAR HILLS
DIXONVILLE
BOUNDARY LAKE SOUTH
WHITE
PINK COUPE
HAMELIN CREEK
TANGENT
NORMANDVILLE
GORDONDALE
SELLOY
EAGLESHAM
SADDLE HILLS
WOKING
BURNT RIVER
HEART RIVER
MARTEN HILLS
WEST PRAIRIE
STURGEON LAKE SOUTH
STURGEON LAKE SOUTH GENERAL AREA
CHINOOK RIDGE
STEEP CREEK
KAYBOB
SIMONETTE
TWO CREEK
CARSON CREEK NORTH
CARSON LAKE
CARSON CREEK
BIG STONE
JACKFISH
FOX CREEK WEST
WINDFALL
BERLAND RIVER
BERLAND RIVER WEST
PINE CREEK
BEAVER CREEK
OBED
ANSELL
RODNEY
LAMBERT CREEK
PEMBINA
MOUNTAIN PARK
LOVETT
WOLF LAKE
BRAZEAU RIVER
BROWN CREEK
WILLESDEN GREEN
STOLBERG
NORDEGG
PADDLE RIVER
ALEXANDER
MAJEAU LAKE
BALDWIN LAKE
CHISHOLM
ATHABASCA
BOLLOQUE LAKE
ROCHESTER
WESTLOCK
FAIRYDELL-BON ACCORD
MORINVILLE
ST. ALBERT-BIG LAKE
ACHESON
GOLDEN SPIKE
HOLBURN
BIGWAY
MUSTANG LAKE
CRAIGSEND
ST. BRIDES
ELSINORE
PLAIN LAKE
BEAVERHILL LAKE
WESTERN
WESTERN SOUTH
BITTERN LAKE
HOLMBERG
WOLF RIVER
CHIGWELL
PREVO CLIVE
MEDICINE RIVER
STETTLER
ESTHER
CROSSFIELD
CARBON
HARMATTAN ELKTON
HUNTER VALLEY
WILDCAT HILLS
MORLEYVILLE
OKOTOKS
TURNER VALLEY
MAZEPPA
CONNERSLEY
COUNTESS
MEDICINE HAT
MANYBERRIES
PENDANT D'OREILLE
FIGURE I-1
MAP OF
ALBERTA
SHOWING
RESERVES OF GAS
(IN THE FIELDS AND AREAS SHOWN IN TABLE I-1)
OIL AND GAS CONSERVATION BOARD
603-6th AVENUE WEST
CALGARY, ALBERTA

II. THE ESTABLISHED RESERVES OF NATURAL GAS LIQUIDS IN ALBERTA

In its last reserve report, dated March, 1962, the Board estimated the recoverable established reserves of natural gas liquids in the Province as of December 31, 1961, to be 682.2 million barrels. The Board now estimates the established reserves of the Province as of December 31, 1962, to be 852.1 million barrels. These reserves are made up of 254.9 million barrels of propane, 161.9 million barrels of butanes and 435.3 million barrels of pentanes plus.

The 170 million barrel increase in reserves in the past 12 months is made up of some 113 million barrels of propane, some 56 million barrels of butanes and some one million barrels of pentanes plus. The additional established reserves are attributable entirely to a projected increase in the recovery ratios at the Rimbey plant and to the reprocessing of pipeline gas at the Edmonton Liquid Gas plant and at the Pacific Petroleums Empress plant now under construction. In fact, the recoverable natural gas liquid reserves from other sources in the Province declined very slightly during the year as a result of additional information obtained with respect to certain pools.

Natural gas liquids are defined in The Oil and Gas Conservation Act as "propane, butanes or pentanes plus, or a combination of them, obtained from the processing of raw gas or condensate.

For the purpose of this report, condensate recovered in stock tanks and marketed without processing is included in the reserves of pentanes plus, and hence natural gas liquids.

Details of the Board's current estimate of the established reserves of natural gas liquids are presented in Table II-1. The table does not show individual fields having a reserve of less than 5 million barrels, however, the sum of these reserves is included under "Other Reserves" and in the Provincial total. The table has been prepared by applying the average liquid recovery ratio over the life of the pool to the remaining established marketable reserves of gas for the pool.

Only the established reserves are shown in Table II-1, however, these are obtained through a calculation of proved and probable reserves. The following definitions have been used to categorize the reserves of natural gas liquids:

Proved Reserves - are the reserves of natural gas liquids estimated to be recoverable from proved gas reserves by processing

(a) where processing facilities exist, to the extent for which facilities have been installed, and

(b) where processing facilities have not yet been planned, to the extent that it is estimated that facilities for extraction can be economically installed.

Probable Reserves - are the reserves of natural gas liquids estimated to be recoverable from probable gas reserves by processing

(a) where processing facilities exist, to the extent for which facilities have been installed, and

(b) where processing facilities have not yet been planned, to the extent that it is estimated that facilities for extraction can be economically installed,

and those additional volumes of natural gas liquids which it is estimated may be recovered economically from proved and probable gas reserves through the installation of additional recovery facilities in existing plants.

Established Reserves - are the reserves of natural gas liquids whose existence and estimated amount can reasonably be counted upon and included all of the proved reserves and a judgment portion of the probable reserves.

Table II-1 presents:

1) Name of plant. Where a plant is not yet in existence, this column has been left blank.

2) Name of Field or Area.

3) Geological formation containing reserves.

4) Remaining marketable gas reserves obtained from Table I-1, billions of cubic feet at standard conditions (14.65 psia and 60° Fahrenheit).

5) Average liquid recovery ratios for propane, butanes and pentanes plus.

6) Established reserves of natural gas liquids, millions of barrels.

TABLE II - 1

OIL AND GAS CONSERVATION BOARD

ESTABLISHED RESERVES OF NATURAL GAS LIQUIDS IN THE PROVINCE OF ALBERTA - DECEMBER 31, 1962

(1)	(2)	(3)	(4)	(5)			(6)			
				LIQUID RECOVERY RATIOS BBLS/MMcf (MARKETABLE GAS)			RECOVERABLE LIQUIDS MILLIONS OF BARRELS			
PLANT	FIELD OR AREA	ZONE	REMAINING MARKETABLE RESERVES OF NATURAL GAS BCF	PROPANE	BUTANES	PENTANES PLUS	PROPANE	BUTANES	PENTANES PLUS	TOTAL
BONNIE GLEN	BONNIE GLEN	LEDUC	538	20.0	12.0	13.0	10.8	6.5	7.0	24.3
	GLEN PARK	LEDUC	7	41.0	18.0	21.0	0.3	0.1	0.1	0.5
	WIZARD LAKE	LEDUC	89	41.0	18.0	19.0	3.7	1.6	1.7	7.0
							14.8	8.2	8.8	31.8
CARSON CREEK	CARSON CREEK	BEAVERHILL LAKE	180	10.0	11.0	70.0	1.8	2.0	12.6	16.4
	CARSON CREEK NORTH	BEAVERHILL LAKE	190	18.0	15.0	40.0	3.4	2.9	7.6	13.9
							5.2	4.9	20.2	30.3
CALGARY	CROSSFIELD	MISSISSIPPIAN	569			26.0			14.8	14.8
		WABAMUN	593			2.0			1.2	1.2
									16.0	16.0
CARSTAIRS	CARSTAIRS	MISSISSIPPIAN	832	5.0	5.8	28.0	4.3	5.0	24.1	33.4
	CROSSFIELD	MISSISSIPPIAN	832	4.4	5.3	29.0	3.7	4.4	24.1	32.2
							8.0	9.4	48.2	65.6
GILBY (1)	GILBY	BLAIRMORE	99			11.0			1.1	1.1
		JURASSIC	150			15.0			2.3	2.3
		MISSISSIPPIAN	201			12.0			2.4	2.4
									5.8	5.8
HARMATANN-ELKTON	HARMATTAN EAST	MISSISSIPPIAN	979	8.3	7.0	35.0	8.1	6.9	34.3	49.3
	HARMATTAN-ELKTON	MISSISSIPPIAN	1087	4.2	2.2	27.0	4.6	2.4	29.3	36.3
							12.7	9.3	63.6	85.6
LEDUC-WOODBEND	LEDUC-WOODBEND	NISKU	57	12.0	12.0	5.0	0.7	0.7	0.3	1.7
		LEDUC	331	26.0	19.0	10.0	8.6	6.3	3.3	18.2
							9.3	7.0	3.6	19.9
LOOKOUT BUTTE	LOOKOUT BUTTE	MISSISSIPPIAN	400	5.0	8.0	50.0	2.0	3.2	20.0	25.2

(1) PROCESSING CARRIED OUT ON 3 SEPARATE PLANTS.

(1)	(2)	(3)	(4)	(5)			(6)			
				LIQUID RECOVERY RATIOS BBLS/MMcF (MARKETABLE GAS)			RECOVERABLE LIQUIDS MILLIONS OF BARRELS			
PLANT	FIELD OR AREA	ZONE	REMAINING MARKETABLE RESERVE OF NATURAL GAS BCF	PROPANE	BUTANES	PENTANES PLUS	PROPANE	BUTANES	PENTANES PLUS	TOTAL
MINNEHIK-BUCK LAKE	MINNEHIK-BUCK LAKE	MISSISSIPPIAN	489			15.0			7.3	7.3
NEVIS(2)	FENN-BIG VALLEY	NISKU AND LEDUC	41	34	28	12	1.4	1.1	0.5	3.0
	NEVIS	DEVONIAN	487	6	6	16	3.0	3.0	7.8	13.8
	STETTLER	NISKU AND LEDUC	8	37	32	12	0.3	0.3	0.1	0.7
							4.7	4.7	4.4	17.5
PEMBINA(3)	PEMBINA	CARDIUM	710	17.1	12.7	14.8	12.1	9.0	10.5	31.6
		BLAIRMORE	166	16.6	12.0	12.0	2.8	2.0	2.0	6.8
							14.9	11.0	12.5	38.4
PINCHER CREEK	PINCHER CREEK	MISSISSIPPIAN	870	3.5	6.0	21.0	3.0	5.2	18.3	26.5
REDWATER	REDWATER	LEDUC	40	100.0	75.0	35.0	4.0	3.0	1.4	8.4
RIMBEY	HOMEGLEN-RIMBEY	LEDUC	770	16.0	13.0	24.0	12.3	10.0	18.5	40.8
	WESTEROSE SOUTH	LEDUC	1226	24.0	16.0	29.0	29.4	19.6	35.6	84.6
							41.7	29.6	54.1	125.4
	SIMONETTE(4)	WABAMUN	80	8.0	5.0	40.0	.6	.4	3.2	4.2
		LEDUC	90	14.0	17.0	25.0	1.3	1.5	2.3	5.1
							1.9	1.9	5.5	9.3
SWAN HILLS	JUDY CREEK	BEAVERHILL LAKE	200	70	32	16	14.0	6.4	3.2	23.6
	SWAN HILLS	BEAVERHILL LAKE	380	83	43	22	31.5	16.3	8.4	56.2
	VIRGINIA HILLS	BEAVERHILL LAKE	62	86	42	20	5.3	2.6	1.2	9.1
							50.8	25.3	12.8	88.9
TURNER VALLEY	TURNER VALLEY	MISSISSIPPIAN	250	6.1		18.0	1.5		4.5	6.0
WATERTON	WATERTON	MISSISSIPPIAN	689			35.0			24.1	24.1
		DEVONIAN	198			7.0			1.4	1.4
									25.5	25.5

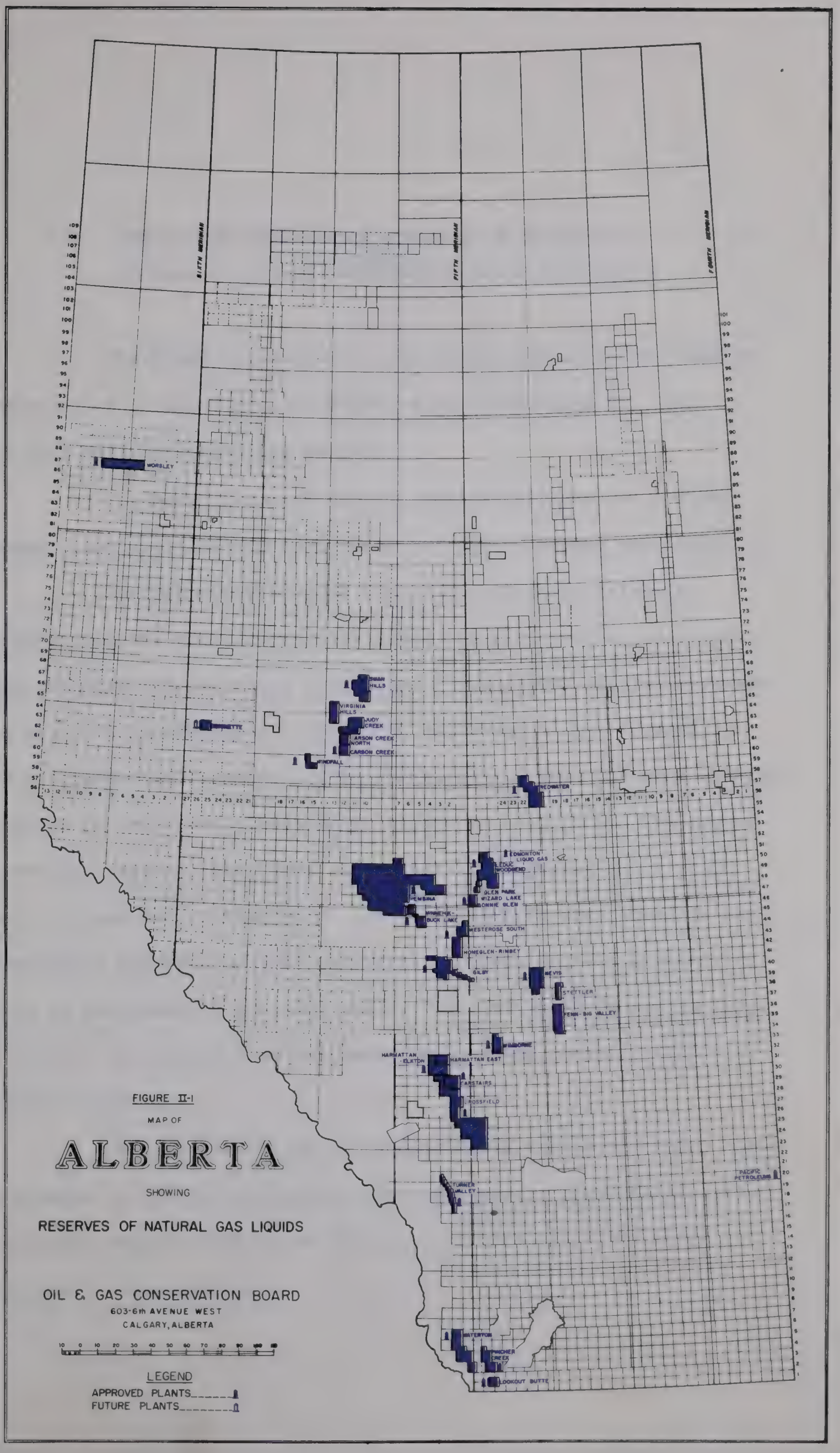
(2) PROCESSING CARRIED OUT ON 2 SEPARATE PLANTS.

(3) PROCESSING CARRIED OUT ON 3 SEPARATE PLANTS.

(4) PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.

(1)	(2)	(3)	(4)	(5)			(6)			
			REMAINING MARKETABLE RESERVE OF NATURAL GAS	LIQUID RECOVERY RATIOS BBLS/MMcf (MARKETABLE GAS)			RECOVERABLE LIQUIDS MILLIONS OF BARRELS			
PLANT	FIELD OR AREA	ZONE	BCF	PROPANE	BUTANES	PENTANES PLUS	PROPANE	BUTANES	PENTANES PLUS	TOTAL
WEST WHITECOURT	WINDFALL	LEDUC	398			120.0			47.8	47.8
WIMBORNE	WIMBORNE	LEDUC	194	5.0	9.0	36.0	1.0	1.8	7.0	9.7
WORSLEY	WORSLEY	LEDUC	218	9.0	7.5	19.8	2.0	1.6	4.3	7.9
SUB TOTAL							177.5	125.7	395.6	698.8
OTHER RESERVES(5)	SMALL FIELDS						2.4	1.2	32.7	36.3
	GAS RE-PROCESSING						75.0	35.0	7.0	117.0
TOTAL							254.9	161.9	435.3	852.1

(5) INCLUDES ALL FIELDS AND OTHER AREAS WHERE RECOVERABLE LIQUID RESERVES ARE ESTIMATED AT LESS THAN FIVE MILLION BARRELS, PLUS RESERVES RECOVERABLE BY THE RE-PROCESSING OF PIPELINE GAS.


SIXTH MERIDIAN
FIFTH MERIDIAN
FOURTH MERIDIAN
WORSLEY
SWAN HILLS
VIRGINIA HILLS
JUDY CREEK
ARSON CREEK NORTH
CARSON CREEK
WINDFALL
REDWATER
EDMONTON LIQUID GAS
LEDUC WOODBEND
GLEN PARK WIZARD LAKE DONNIE GLEN
PEMBINA
WESTEROSE SOUTH
HOMEGLEN-RIMBEY
GILBY
KEVIS
STETTLER
PENN-BIG VALLEY
HARMATTAN ELKTON
HARMATTAN EAST
STRACHAN
EARSTAIRS
ROSSFIELD
TURNER VALLEY
PACIFIC PETROLEUMS
WATERTON
LOOKOUT BUTTE
FIGURE II-1
MAP OF
ALBERTA
SHOWING
RESERVES OF NATURAL GAS LIQUIDS
OIL & GAS CONSERVATION BOARD
603-6th AVENUE WEST
CALGARY, ALBERTA
LEGEND
APPROVED PLANTS
FUTURE PLANTS

III. THE PROVED RECOVERABLE RESERVES OF CRUDE OIL IN ALBERTA

The Board has estimated the proved remaining recoverable reserves of crude oil in the Province as of December 31, 1962, to be 3.62 billion stock tank barrels.

The term crude oil used in this report has its ordinary meaning and excludes all condensate and other natural gas liquids.

The reserve estimates for crude oil refer solely to proved reserves and include only crude oil recoverable under existing economic and operating conditions. The proved drilled reserves in any pool consist of the crude oil estimated to be recoverable by the production systems now in operation and from the area actually drilled on the spacing pattern in effect in that pool. The proved undrilled reserves are those under undrilled spacing units which are so close and so related to the drilled units that there is every reasonable probability that they will be produced when drilled, or will be recovered by existing wells. The estimates do not include crude oil obtainable from oil sands, oil shale, coal or other substitute sources.

In the case of new pools discovered during the year, the estimates of proved recoverable reserves in many cases necessarily represent only a fraction of the reserves which may ultimately be assigned to the pools.

The crude oil reserves have been established having regard to (1) independent studies of the Board staff, (2) submissions made to the Board by industry in connection with hearings respecting maximum permissive rates (MPR's) of production, and (3) submissions made to the Board respecting spacing units, fluid injection schemes and unit agreements.

The Board's findings with respect to the proved recoverable reserves of crude oil for the Province are set out in Table III-1. Certain of the pools tabulated in Table III-1 have been allocated proved reserves attributable to fluid injection schemes in effect and of proved efficiency. For these pools Table III-2 shows a comparison of recoverable reserves and recovery factors before and after allocation of additional reserves attributable to the schemes. The reserves are given in stock tank barrels at standard conditions. The tables do not list separately the pools in which the remaining recoverable reserves are less than five million stock tank barrels. The reserves of these minor or nearly depleted pools (whether in designated fields or not) make up the figure shown under "Other Pools".

Table III-1 presents:

1) Name of pool.
2) Original crude oil in place, millions of stock tank barrels.
3) Fraction of original crude oil in place estimated to be recoverable by

the recovery mechanisms presently in effect.

4) Crude oil originally recoverable by the recovery mechanisms presently in effect, millions of stock tank barrels.

5) Cumulative production of crude oil to December 31, 1962, millions of stock tank barrels.

6) Recoverable crude oil remaining as of December 31, 1962, millions of stock tank barrels.

Table III-2 presents:

1) Name of pool.

2) Fraction of original crude oil in place originally recoverable by natural depletion.

3) Crude oil originally recoverable by natural depletion, millions of stock tank barrels.

4) Fraction of original crude oil in place recoverable by the recovery mechanism now in effect.

5) Total crude oil originally recoverable by the recovery mechanism now in effect, millions of stock tank barrels.

TABLE III-1

OIL AND GAS CONSERVATION BOARD

PROVED RESERVES OF CRUDE OIL IN THE PROVINCE OF ALBERTA - DECEMBER 31, 1962

(1)	(2)	(3)	(4)	(5)	(6)
POOL	ORIGINAL CRUDE OIL IN PLACE MILLIONS OF ST BBL	RECOVERY FACTOR FRACTION	ORIGINALLY RECOVERABLE CRUDE OIL MILLIONS OF ST BBL	CUMULATIVE PRODUCTION TO DECEMBER 31, 1962 MILLIONS OF ST BBL	REMAINING RECOVERABLE CRUDE OIL AS OF DECEMBER 31,1962 MILLIONS OF ST BBL
Acheson D-3	150	0.59	88 (1)	24.2	63.8
Bantry Blairmore	36	0.18	6.5	1.3	5.2
Bellshill Lake Blairmore	190	0.13	25	5.3	19.7
Big Lake D-3	20	0.55	11	1.8	9.2
Bonnie Glen D-3	590	0.59	350	69.5	280.5
Carson Creek North Beaverhill Lake A	78	0.15	12	1.0	11.0
Carson Creek North Beaverhill Lake B	210	0.15	31	1.8	29.2
Crossfield Cardium	160	0.10	16 (2)	4.3	11.7
Deer Mountain Beaverhill Lake	58	0.12	7	0.4	6.6
Erskine D-3	35	0.40	14	9.0	5.0
Excelsior D-2	35	0.57	20	9.7	10.3
Fairydell D-3	18	0.47	8.5	3.0	5.5
Fenn-Big Valley D-2	360	0.50	180	59.5	120.5
Fenn West D-2	14	0.40	5.6	0.3	5.3
Gilby Jurassic B	93	0.12	11	0.5	10.5
Glen Park D-3	26	0.56	15	3.5	11.5

(1)	(2)	(3)	(4)	(5)	(6)
POOL	ORIGINAL CRUDE OIL IN PLACE MILLIONS OF ST BBL	RECOVERY FACTOR FRACTION	ORIGINALLY RECOVERABLE CRUDE OIL MILLIONS OF ST BBL	CUMULATIVE PRODUCTION TO DECEMBER 31, 1962 MILLIONS OF ST BBL	REMAINING RECOVERABLE CRUDE OIL AS OF DECEMBER 31, 1962 MILLIONS OF ST BBL
Golden Spike South D-3	320	0.69	220 (1)	26.6	193.4
Harmattan East Rundle	170	0.35	59	7.3	51.7
Harmattan Elkton Main Rundle	170	0.33	56	12.1	43.9
Hussar Ostracod A	40	0.30	12	1.9	10.1
Innisfail D-3	130	0.45	58	11.3	46.7
Joarcam Viking	150	0.37	55 (2)	42.9	12.1
Joffre D-2	140	0.14	20	9.7	10.3
Judy Creek Beaverhill Lake	780	0.15	120 (2)	8.3	111.7
Judy Creek West Beaverhill Lake	210	0.15	32	1.9	30.1
Kaybob Beaverhill Lake	270	0.15	40	8.5	31.5
Leduc-Woodbend D-2A	210	0.33	69 (2)	62.2	6.8
Leduc-Woodbend D-3A	300	0.60	180 (1)	136.5	43.5
Pembina Keystone Belly River M	45	0.12	5.4	0.1	5.3
Pembina Cardium Area A (3)	2600 (5)	0.15	390 (2)	276.4	823.6
Area B (4)	1600 (5)	0.44	710 (1)		
Redwater D-3	1400	0.55	770	262.6	507.4
Simonette D-3	70	0.36	25	1.8	23.2
Stettler D-2	58	0.41	24 (1)	11.8	12.2
Stettler Main D-3	30	0.50	15	5.0	10.0
Sturgeon Lake D-3	38	0.50	19	3.8	15.2
Sturgeon Lake South D-3	240	0.50	120	19.2	100.8
Sundre Rundle A	80	0.25	20	7.8	12.2
Swan Hills Beaverhill Lake A & B	2400	0.17	410 (2)	26.7	383.3

(1)	(2)	(3)	(4)	(5)	(6)
POOL	ORIGINAL CRUDE OIL IN PLACE MILLIONS OF ST BBL	RECOVERY FACTOR FRACTION	ORIGINALLY RECOVERABLE CRUDE OIL MILLIONS OF ST BBL	CUMULATIVE PRODUCTION TO DECEMBER 31, 1962 MILLIONS OF ST BBL	REMAINING RECOVERABLE CRUDE OIL AS OF DECEMBER 31, 1962 MILLIONS OF ST BBL
TURNER VALLEY RUNDLE	1000	0.12	120 (2)	110.7	9.3
TWINING RUNDLE	63	0.10	6.3	0.2	6.1
VIRGINIA HILLS BEAVERHILL LAKE	460	0.17	78	6.2	71.8
WEST DRUMHELLER D-2	37	0.45	17	10.2	6.8
WESTEROSE D-3	160	0.63	100	14.6	85.4
WILLESDEN GREEN CARDIUM	320	0.08	26 (2)	6.7	19.3
WIZARD LAKE D-3	380	0.58	220	35.9	184.1
OTHER POOLS	2500 (E)		323	172.0	150
TOTAL	18400	-	5120	1500	3620

(1) SEE TABLE III - 2

(2) FLUID INJECTION SCHEMES ARE IN OPERATION BUT NO ADDITIONAL RECOVERABLE RESERVES ARE ATTRIBUTED TO THEM AS YET.

(3) AREA A COMPRISES THE PORTION OF THE POOL SUBJECT TO PRIMARY DEPLETION OR TO FLUID INJECTION SCHEMES OF UNDEMONSTRATED EFFICACY.

(4) AREA B COMPRISES THE PORTION OF THE POOL SUBJECT TO FLUID INJECTION SCHEMES FROM WHICH ADDITIONAL RECOVERY IS ASSURED.

(5) OIL IN PLACE ADJUSTED TO 1.0 MD CUT-OFF.

(E) ESTIMATE NOT WELL SUBSTANTIATED.

TABLE III-2

OIL AND GAS CONSERVATION BOARD

INCREASE IN PROVED ORIGINALLY RECOVERABLE RESERVES OF CRUDE OIL

ATTRIBUTABLE TO FLUID INJECTION SCHEMES - DECEMBER 31, 1962

(1) POOL	(2) NATURAL DEPLETION RECOVERY FACTOR FRACTION	(3) CRUDE OIL ORIGINALLY RECOVERABLE BY NATURAL DEPLETION MILLIONS OF ST BBL	(4) RECOVERY FACTOR INCLUDING EFFECT OF FLUID INJECTION FRACTION	(5) ORIGINALLY RECOVERABLE CRUDE OIL MILLIONS OF ST BBL
Acheson D-3	0.54 (E)	81	0.59	88
Golden Spike South D-3	0.45 (E)	140	0.69	220
Leduc-Woodbend D-3 A	0.55	160	0.60	180
Pembina Cardium Area B (1)	0.20	320	0.44	710
Stettler D-2	0.30 (E)	18	0.41	24
Other Pools	0.21 (E)	26	0.38	48

(E) Estimate not well substantiated

(1) Area B comprises the portion of the pool subject to fluid injection schemes from which additional recovery is assured.

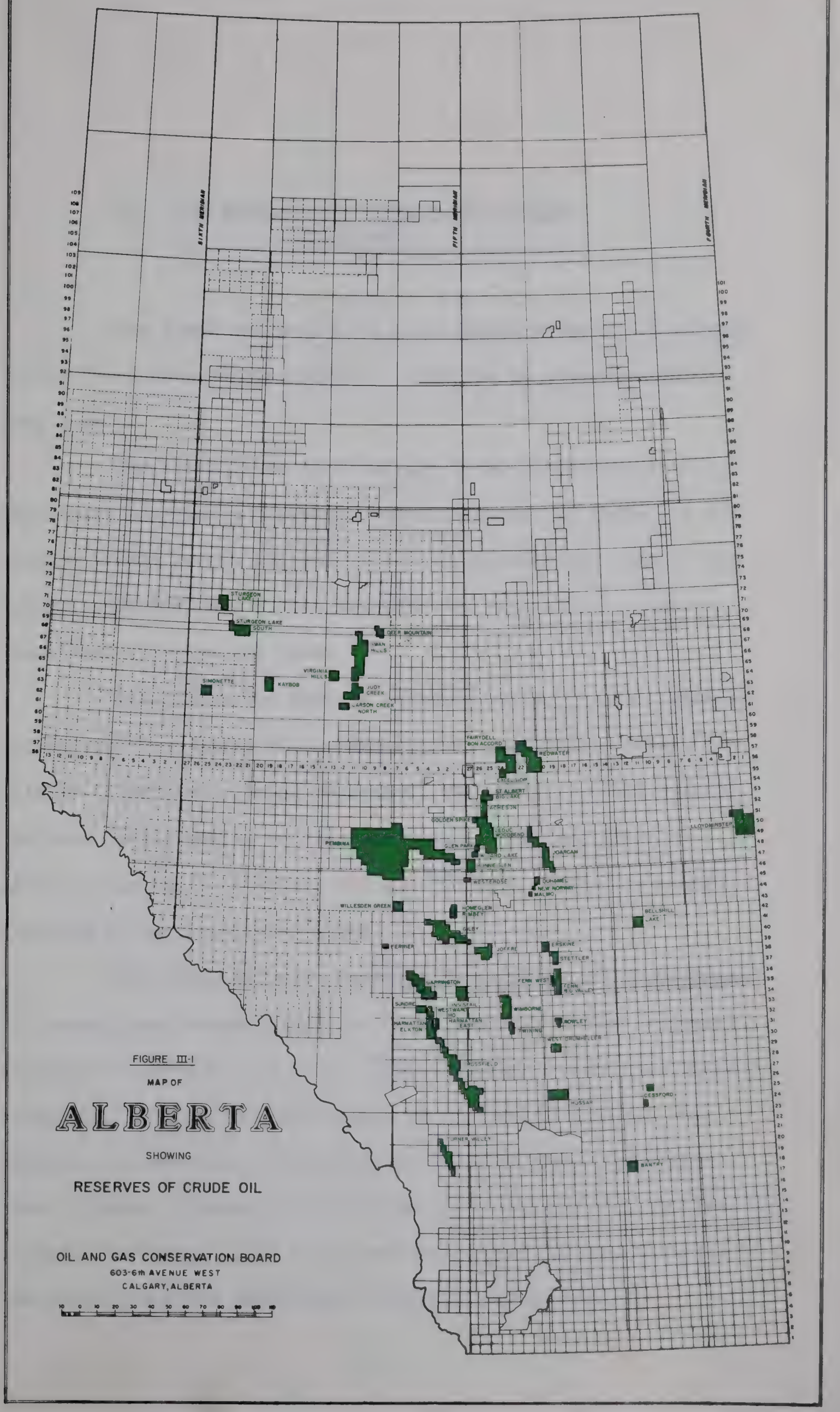


FIGURE III-1

MAP OF

ALBERTA

SHOWING

RESERVES OF CRUDE OIL

OIL AND GAS CONSERVATION BOARD
603-6th AVENUE WEST
CALGARY, ALBERTA

IV. THE ESTABLISHED RESERVES OF SULPHUR IN ALBERTA

The Board estimates the established reserves of sulphur in the Province as of December 31, 1962, to be some 80 million long tons.

The established reserves are those contained in pools from which sulphur is currently being recovered or where, in the opinion of the Board, sulphur will be recovered some time in the future. Not included in the estimate are the sulphur reserves associated with the oil sands.

Details of the Board's estimate of the sulphur reserves are presented in Table IV-1. Except for those fields from which sulphur is presently being recovered, the table does not list individual fields having recoverable reserves of less than one million long tons. However, the sum of these smaller reserves is included in the provincial total.

The table has been prepared by applying the appropriate H_2S content and recovery efficiency to the established recoverable reserves of gas for each pool. Where sulphur is currently being recovered, the recovery efficiency is as specified in the plant approval or, where not specified, is based on plant experience. Where sulphur is expected to be produced in the future, the recovery has been estimated at 90 to 95 per cent depending upon the size of the reserve and the percentage of H_2S in the raw gas.

Table IV-1 presents:

1) Name of processing plant, where applicable.

2) Name of field or area from which gas is being processed or expected to be processed.

3) Geological formation containing the reserve.

4) Remaining established recoverable natural gas reserves obtained from Table I-1, billions of cubic feet at standard conditions (14.65 psia and 60° Fahrenheit).

5) The H_2S content of the raw gas, per cent.

6) Remaining established reserves of sulphur, thousands of long tons.

TABLE IV - 1

OIL AND GAS CONSERVATION BOARD

ESTABLISHED RESERVES OF SULPHUR IN THE PROVINCE OF ALBERTA - DECEMBER 31, 1962

(1)	(2)	(3)	(4)	(5)	(6)
PLANT	FIELD OR AREA	ZONE	REMAINING RECOVERABLE GAS BCF	H_2S CONTENT PER CENT	REMAINING RECOVERABLE SULPHUR 1000 LONG TONS
-	Berland River	Leduc	400	15.4	2,200
Calgary	Crossfield	Calgary Mississippian	665	1.0	235
	Crossfield	Wabamun	1180	34.0	14,180
					14,415
Carstairs	Carstairs	Mississippian	960	0.5	145
	Crossfield	Crossfield Mississippian	985	0.5	150
					295
Coleman	Savanna Creek	Mississippian	525	14.2	2,610
-	Crossfield East	Wabamun	300	38.1	4,080
-	Harmattan-Elkton	Mississippian	1360	0.9	430
	Harmattan-Elkton	Leduc	75	53.4	1,350
					1,780
Innisfail	Innisfail	Leduc	130	14.0	615
Jumping Pound	Jumping Pound	Mississippian	505	3.5	530
	Sarcee	Mississippian	155	5.5	260
					790
Nevis(1)	Fenn-Big Valley	Nisku and Leduc	65	3.0	60
	Nevis	Devonian	610	6.7	1,300
	Stettler	Nisku and Leduc	15	3.2	15
					1,375
Okotoks	Okotoks	Wabamun	340	34.4	4,180

(1) Gas from Nevis Field processed in two separate plants.

(1)	(2)	(3)	(4)	(5)	(6)
PLANT	FIELD OR AREA	ZONE	REMAINING RECOVERABLE GAS BCF	H_2S CONTENT PER CENT	REMAINING RECOVERABLE SULPHUR 1000 LONG TONS
-	PANTHER RIVER	WABAMUN	110	87	3,400
PINCHER CREEK	PINCHER CREEK	MISSISSIPPIAN	1160	10.8	4,240
REDWATER	REDWATER	LEDUC	115	2.8	95
RIMBEY	HOMEGLEN-RIMBEY	LEDUC	905	3.3	1,010
	WESTEROSE SOUTH	LEDUC	1440	1.4	680
					1,690
-	SIMONETTE	WABAMUN	125	18.5	770
	SIMONETTE	LEDUC	140	16.6	780
					1,550
TURNER VALLEY	TURNER VALLEY	MISSISSIPPIAN	340	1.8	195
WATERTON	WATERTON	MISSISSIPPIAN	1380	26.5	13,000
	WATERTON	DEVONIAN	250	22.2	1,900
					14,900
WEST WHITECOURT	BEAVER CREEK	WABAMUN	80	34.9	980
	PINE CREEK	WABAMUN	90	34.9	1,100
	PINE CREEK	LEDUC	1230	26.1	11,300
	WINDFALL	LEDUC	610	15.6	3,360
					16,740
WILDCAT HILLS	WILDCAT HILLS	MISSISSIPPIAN	735	4.0	1,030
-	WIMBORNE	LEDUC	300	15.0	1,570
-	OTHERS(2)	-	-	-	2,550
				TOTAL	80,300

(2) FIELDS AND AREAS HAVING SULPHUR RESERVES OF UNDER 1,000,000 LONG TONS.

V. TRENDS IN EXPLORATION FOR AND GROWTH OF GAS RESERVES IN ALBERTA

Two general methods have been used by estimators in forecasting the growth of oil or natural gas reserves - the geological method and the statistical method. The geological method consists of determining the total volume of available sediments and applying certain accumulation factors. No new information of this kind has been presented to the Board since publication of its September, 1958 report. At that time, the estimates of ultimate recoverable gas reserves in Alberta ranged from 60 to 100 trillion cubic feet.

Forecast Based on the Statistical Method

The statistical method of estimating the growth in gas reserves has been used in several previous Board reserve reports and is again used in this report. Data on exploratory drilling, the growth of initial marketable gas reserves and the percentage appreciation of recent discoveries are employed in establishing various trends and in forecasting the future growth of gas reserves.

Due to the large amount of historical data involved, the reserves used in this trend study are on an actual Btu basis rather than a common basis of 1000 Btu per cubic foot. While the total volume of reserves when converted to a 1000 Btu basis is about six per cent greater than the unconverted volume, it is assumed that

the trends established by this study may be used in predicting the growth of marketable reserves having an average heating value of 1000 Btu per cubic foot.

Exploratory Drilling and Growth of Reserves

Table V-1 classifies the total initial marketable reserves and the names of the major (10 billion cubic feet or over) pools and fields by year of discovery. Figure V-1 is a graphical presentation of the data in Table V-1 together with the corresponding data of the nine previous Board reserve reports. The average growth in initial marketable reserves due to new discoveries and to appreciation of known reserves has been about 2.6 trillion cubic feet per year and is represented by a dashed line on Figure V-1.

Data concerning the annual and cumulative exploratory wells drilled and the currently established remaining and initial marketable reserves by year of discovery are summarized in Table V-2. Columns 8 and 9 show the annual and cumulative discovery rates per wildcat well. By the end of 1962, the drilling of 6,179 wildcat wells (an average of one for every 32 square miles of potential gas area within Alberta) has resulted in established reserves of 35,456 billion cubic feet, yielding an overall discovery rate of 5.7 billion cubic feet per well. This figure compares with 5.9, 6.3 and 6.0 billion cubic feet per well in the March, 1962, March, 1961, and December, 1959, reports, respectively.

Figure V-2 is a plot of the discovery rates as presented in Table V-2. (The adjusted lines show the effect of anticipated future appreciation and are discussed below). The annual rates for the past few years are below the long-time average. However, most of the fields and areas included in these reserves are still in various stages of development and any future appreciation will increase the annual and, to a lesser extent, the cumulative discovery rates.

In addition, the incentive for exploring for and developing new gas reserves has been significantly less during the past few years than in the period 1953 to 1958. During that time, the major gas export companies were contracting for gas for export to Eastern Canada and the United States. The companies now have sufficient gas under contract to meet their current market requirements and hence the market for new gas reserves is presently limited.

Percentage Appreciation of Reserves

The percentage increases of subsequent estimates over the initial estimate for the gas reserves discovered in each year were calculated and plotted as Figure V-3 for 1951 to 1960, inclusive.

A volume weighted "normal appreciation" line was determined as shown. This curve was used to construct a "reserve appreciation ratio" curve which is shown as Figure V-4.

Knowing the current reserve estimate of a group of reserves having a common year of discovery and also knowing the elapsed

time from this discovery date to the date of the reserve estimate, it is possible to forecast what the reserve estimate for that particular group of reserves will be at any time in the future, having in mind that on the average a reserve is not fully developed until some six to seven years following discovery. In this manner the current annual reserve estimates for each of the years 1956 through 1962 were adjusted to their fully appreciated value and are shown as columns 5 and 6 of Table V-3. The corresponding adjusted discovery rates per wildcat well are shown as columns 7 and 8 and are also plotted on Figure V-2.

The growth of initial marketable reserves as related to wildcat drilling is presented as Figure V-5, with the upper portion reproduced on a larger scale and shown as Figure V-6. The cumulative reserves, as adjusted for future appreciation are also plotted on Figure V-6. The long term trend curve, as developed in previous Board reserve reports, was continued in this report with only a slight adjustment to reflect minor changes in the data. It may be noted that the adjusted points for 1961 and 1962 fall below this trend curve. However, the Board believes that this can be expected as a natural result of the lack of incentive as previously mentioned.

Ultimate reserves are still anticipated to be in excess of 80 trillion cubic feet by the time 20,000 exploratory wells (one for every 10 square miles of potential area) have been drilled.

TABLE V - 1

OIL AND GAS CONSERVATION BOARD

TRENDS IN WILDCAT DRILLING AND GROWTH OF MARKETABLE GAS RESERVES IN THE PROVINCE OF ALBERTA

(1)	(2)	(3)	(4)	(5)	(6)
	WILDCAT WELLS DRILLED			INITIAL MARKETABLE RESERVES	
YEAR	ANNUAL	CUMULATIVE	NAMES OF MAJOR GAS RESERVES DISCOVERED	ANNUAL Bcf	CUMULATIVE Bcf
Prior to 1931		201	Bow Island, Brooks, Foremost, Medicine Hat (Medicine Hat, Bow Island), Pouce Coupe, Turner Valley (Mississippian Associated), Viking-Kinsella (Viking) and Wainwright.	3144	3,144
1931 to 1940		304	Aden (Bow Island, Basal Colorado, Mississippian), Bantry-Tilley, Lloydminster, Princess, Turner Valley (Mississippian Solution), Wildmere and one small pool.	671	3,815
1941 to 1945		513	Black Butte (Bow Island, Sunburst-Ellis, Mississippian), Jumping Pound, Oyen, Suffield and four small pools.	706	4,521
1946	54	567	Beaverhill Lake (Viking), Brooks North-East (Mannville), Lindbergh, Pendant d'Oreille (Bow Island) and Provost.	868	5,389
1947	71	638	Fairydell-Bon Accord, Leduc-Woodbend, Manyberries, Medicine Hat (Ellis), Smith Coulee and three small pools.	766	6,155
1948	126	764	Brooks North-East (Bow Island), Morinville, Pincher Creek, Redwater and four small pools.	1196	7,351

(1)	(2)	(3)	(4)	(5)	(6)
	WILDCAT WELLS DRILLED			INITIAL MARKETABLE RESERVES	
YEAR	ANNUAL	CUMULATIVE	NAMES OF MAJOR GAS RESERVES DISCOVERED	ANNUAL Bcf	CUMULATIVE Bcf
1949	209	973	Acheson East, Bolloque Lake, Boyle-Mustang-Amisk Lake, Campbell-Namao, Castor, Cessford, Excelsior, Golden Spike, Inland, Joarcam, Lac La Biche, Normandville (Gething), Plain Lake, Rochester, Stettler, Westlock (Viking), Willingdon and eleven small pools.	2187	9,538
1950	224	1197	Acheson, Countess (Bow Island), Drumheller (Blairmore), Fenn-Big Valley (Viking, Nisku, Leduc), Jarvie, Rolling Hills (Bow Island), Sibbald, Whitelaw and Eighteen small pools.	412	9,950
1951	461	1658	Atlee-Buffalo (Bow Island), Belloy (cadotte, Gething, Mississippian), Bonnie Glen, Clive, Countess (Basal Colorado), Etzikom (Bow Island), Figure Lake, Fort Saskatchewan, Glen Park, Hamelin Creek, Majeau Lake, Millet, Okotoks, Tangent, Viking-Kinsella (Blairmore, Devonian), Wizard Lake and twenty small pools.	1670	11,620
1952	469	2127	Alix, Bindloss (Viking), Bittern Lake, Chigwell, Comrey (Bow Island), Dixonville, Eaglesham (Mississippian), Erskine, Gordondale (Paddy), Hackett, Hairy Hill, Hamilton Lake, Hercules, Holmberg, Hussar (Blairmore), Minnehik-Buck Lake, Nevis, Olds, Phil-Can, Rycroft, St. Albert-Big Lake, St. Brides, West Drumheller, Westerose, Wildunn Creek and twenty-five small pools.	2896	14,516

(1)	(2)	(3)	(4)	(5)	(6)
	WILDCAT WELLS DRILLED			INITIAL MARKETABLE RESERVES	
YEAR	ANNUAL	CUMULATIVE	NAMES OF MAJOR GAS RESERVES DISCOVERED	ANNUAL Bcf	CUMULATIVE Bcf
1953	399	2526	Atlee-Buffalo (Basal Blairmore), Donalda (Viking, Detrital), Dyberg, Enchant, Eyremore, Gilby (Viking, Jurassic), Gordondale (Notikewin, Gething), Homeglen-Rimbey, Kessler (Viking), Kneller, Parkland, Pembina (Cardium Solution), Pouce Coupe South (Peace River, Triassic), Rich, Samson, Sedalia, Steen River, Sturgeon Lake South (Gething, Leduc), Sturgeon Lake South General Area (Gething, Permo-penn), Sylvan Lake (Blairmore, Mississippian), Three Hills Creek (Viking, Mississippian), Usona, Waterglen, Wayne-Rosedale (Viking, Blairmore), Westerose South (Leduc), Wood River and eighteen small pools.	4556	19,072
1954	351	2877	Alexander, Bellshill Lake (Viking, Blairmore), Bindloss (Basal Blairmore), Braeburn, Crossfield (Wabamun), Garrington (Leduc), Ghost Pine (Blairmore), Gilby (Basal Blairmore, Pekisko, Banff, Wabamun), Harmattan-Elkton (Mississippian Associated), Holbourne, Hussar (Viking), Pembina (Belly River), Saddle Hills (Peace River, Gething), Sarcee, Savanna Creek, Turin (Bow Island, Basal Blairmore), Willesden Green (Cardium Solution), Wimborne (Viking, Leduc) and fifteen small pools.	3222	22,294
1955	346	3223	Aden (Sunburst-Ellis), Burnt River, Carbon (Blairmore), Chinook Ridge, Control, Harmattan-Elkton (Mississippian Solution), Hussar		

(1)	(2)	(3)	(4)	(5)	(6)
	WILDCAT WELLS DRILLED			INITIAL MARKETABLE RESERVES	
YEAR	ANNUAL	CUMULATIVE	NAMES OF MAJOR GAS RESERVES DISCOVERED	ANNUAL Bcf	CUMULATIVE Bcf
1955 (cont)			(Basal Colorado), Lone Pine Creek (Wabamun), Pakowki Lake, Redland (Viking), Red Willow (Viking), Richdale, Rolling Hills (Basal Colorado), Sturgeon Lake South (Triassic), Sundre (Mississippian Associated and Solution), Westward Ho (Mississippian Solution), Windfall (Viking, Leduc) and eighteen small pools.	1133	23,427
1956	384	3607	Beaver Creek, Connorsville, Crossfield (Mississippian), Eaglesham (Gething, Cadomin), Ester, Goodwin Lake, Harmattan East (Mississippian Associated), Innisfail (Mississippian, Wabamun), Joffre (Nisku Solution), Kevisville (Leduc), Kirkcaldy (Basal Mannville), Mazeppa, Mountain Park, Normandville (Triassic, Mississippian), Obed, Paddle River, Pembina (Viking, Mississippian), Pine Creek (Wabamun), Pouce Coupe South (Cadomin, Jurassic), Rosebud, Steep Creek (Gething, Triassic), Two Creek, Waterton (Mississippian), West Prairie and Thirty-one small pools.	3737	27,164
1957	428	4035	Antelope, Blueridge, Carson Creek, Chisholm, Crossfield (Basal Blairmore), Faust South, Garrington (Viking), Harmattan East (Mississippian Solution), Harmattan-Elkton (Mississippian Non-Associated), Innisfail (Leduc), Joffre (Viking, Basal Blairmore), Kaybob (Notikewin, Cadomin, Beaverhill Lake, Winterburn),		

(1)	(2)	(3)	(4)	(5)	(6)
	WILDCAT WELLS DRILLED			INITIAL MARKETABLE RESERVES	
YEAR	ANNUAL	CUMULATIVE	NAMES OF MAJOR GAS RESERVES DISCOVERED	ANNUAL Bcf	CUMULATIVE Bcf
1957 (cont)			Lambert Creek, Lovett (Rundle), Pembina (Blairmore, Nordegg), Pine Creek (Leduc), Saddle Hills (Permo-Penn), Stolberg, Sundre (Viking, Basal Blairmore), Swan Hills (Beaverhill Lake Solution), Virginia Hills (Blairmore, Beaverhill Lake Solution, Slave Point) and twenty-four small pools.	2604	29,768
1958	404	4439	Berland River, Berland River West, Boundary Lake South, Caroline, Carson Creek North, Carstairs (Mississippian), Clear Hills, Fox Creek West (Nisku), Greencourt (Nordegg), Penhold, Pouce Coupe South (Gething), Prevo, Simonette (Leduc), Steep Creek (Permo-Penn), Waterton (Devonian), Wildcat Hills, Woking and twenty-six small pools.	2590	32,358
1959	431	4870	Bigoray (Mississippian), Brazeau River, Burnt Timber, Jackfish, Judy Creek, Lookout Butte, Lovett (Blairmore), Medicine River, Retlaw, Simonette (Wabamun), Sundre (Mississippian Non-Associated), Verger (Basal Mannville, Mississippian), Waskahigan, Worsley and twenty-two small pools.	1407	33,765
1960	403	5273	Bigoray (Blairmore), Bigstone, Black Butte (Basal Colorado), Blindman River (Mississippian), Brown Creek, Carson Lake, Crossfield East (Mississippian), Jenner (Bow Island, Basal Colorado), Kirkcaldy		

(1)	(2)	(3)	(4)	(5)	(6)
	WILDCAT WELLS DRILLED			INITIAL MARKETABLE RESERVES	
YEAR	ANNUAL	CUMULATIVE	NAMES OF MAJOR GAS RESERVES DISCOVERED	ANNUAL BCF	CUMULATIVE BCF
1960 (CONT)			(MISSISSIPPIAN), MOOSE MOUNTAIN, NORDEGG, RAVEN RIVER (VIKING, MISSISSIPPIAN), REDLAND (BLAIRMORE), ROWLEY (VIKING, MISSISSIPPIAN), SIEU RIVER, SIMONETTE (CADOMIN), STURGEON LAKE SOUTH GENERAL AREA (CADOMIN), TONY CREEK (VIKING), WILDHORSE CREEK, WILLESDEN GREEN (BASAL BLAIRMORE), WOLF LAKE AND THIRTY-SIX SMALL POOLS.	792	34,557
1961	422	5695	BLINDMAN RIVER (BANFF), CRAIGEND, CROSSFIELD EAST (WABAMUN), GREENCOURT (MISSISSIPPIAN), HARMATTAN-ELKTON (LEDUC), MARTEN HILLS (WABAMUN), MORLEYVILLE (MISSISSIPPIAN), PENDANT D'OREILLE (MANNVILLE), SYLVAN LAKE (EDMONTON, LEDUC), TONY CREEK (CADOMIN, NISKU, BEAVERHILL LAKE), WAIPAROUS CREEK, WESTWARD HO (VIKING, BLAIRMORE) AND EIGHTEEN SMALL POOLS.	589	35,146
1962	484	6179	ANSELL, HUNTER VALLEY, MARTEN HILLS (MANNVILLE), RODNEY, STRATHMORE, VIRGINIA HILLS (TRIASSIC) AND TWENTY SMALL POOLS.	310	35,456

TABLE V - 2

OIL AND GAS CONSERVATION BOARD

TRENDS IN WILDCAT DRILLING AND IN THE DISCOVERY OF INITIAL MARKETABLE RESERVES

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	WILDCAT WELLS DRILLED		MARKETABLE GAS RESERVES AS OF DECEMBER 31, 1962				INITIAL MARKETABLE RESERVES PER WILDCAT WELL	
DISCOVERY YEAR	ANNUAL	CUMULATIVE	REMAINING Bcf	PRODUCED Bcf	INITIAL Bcf	CUMULATIVE INITIAL Bcf	ANNUAL Bcf/Well	CUMULATIVE Bcf/Well
Prior to 1946		513	3115	1406	4521	4521		8.8
1946	54	567	709	159	868	5389	16.1	9.5
1947	71	638	627	139	766	6155	10.8	9.6
1948	126	764	1026	170	1196	7351	9.5	9.6
1949	209	973	2028	159	2187	9538	10.5	9.8
1950	224	1197	376	36	412	9950	1.8	8.3
1951	461	1658	1514	156	1670	11620	3.6	7.0
1952	469	2127	2699	197	2896	14516	6.2	6.8
1953	399	2526	4281	275	4556	19072	11.4	7.5
1954	351	2877	3132	90	3222	22294	9.2	7.8
1955	346	3223	1090	43	1133	23427	3.3	7.3
1956	384	3607	3675	62	3737	27164	9.7	7.5
1957	428	4035	2576	28	2604	29768	6.1	7.4
1958	404	4439	2504	86	2590	32358	6.4	7.3
1959	431	4870	1405	2	1407	33765	3.3	6.9
1960	403	5273	789	3	792	34557	2.0	6.6
1961	422	5695	587	2	589	35146	1.4	6.2
1962	484	6179	310	-	310	35456	0.6	5.7

TABLE V - 3

OIL AND GAS CONSERVATION BOARD

ANTICIPATED APPRECIATION OF KNOWN RESERVES AND CORRESPONDING ADJUSTED DISCOVERIES PER WILDCAT WELL

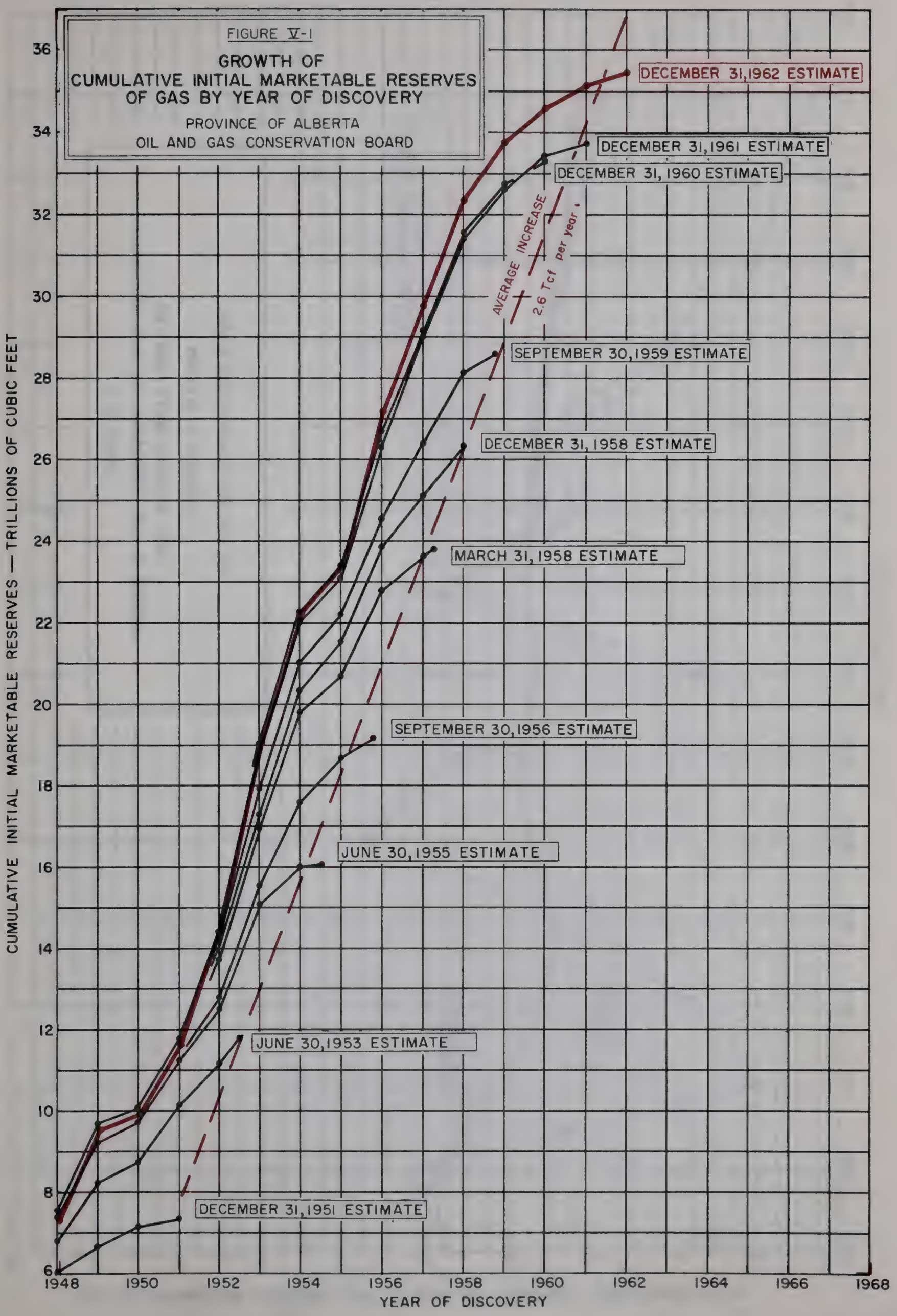
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	INITIAL MARKETABLE RESERVES AS OF DECEMBER 31, 1962	AVERAGE DISCOVERY DATE TO DECEMBER 31, 1962		ULTIMATE INITIAL MARKETABLE RESERVES		ADJUSTED INITIAL MARKETABLE RESERVES PER WILDCAT WELL	
DISCOVERY YEAR	BCF	YEARS	RESERVE APPRECIATION RATIO(1)	ANNUAL BCF	CUMULATIVE BCF	ANNUAL BCF/WELL	CUMULATIVE BCF/WELL
PRIOR TO 1956	23,427	7.5	1.00		23,430		7.3
1956	3,737	6.5	1.02	3,790	27,220	9.9	7.6
1957	2,604	5.5	1.05	2,730	29,950	6.4	7.4
1958	2,590	4.5	1.12	2,890	32,840	7.2	7.4
1959	1,407	3.5	1.23	1,730	34,570	4.0	7.1
1960	792	2.5	1.46	1,150	35,720	2.9	6.8
1961	589	1.5	2.00	1,180	36,900	2.8	6.5
1962	310	0.5	4.6	1,400	38,300	2.9	6.2

(1) FIGURE V-4

FIGURE V-1

GROWTH OF CUMULATIVE INITIAL MARKETABLE RESERVES OF GAS BY YEAR OF DISCOVERY

PROVINCE OF ALBERTA
OIL AND GAS CONSERVATION BOARD



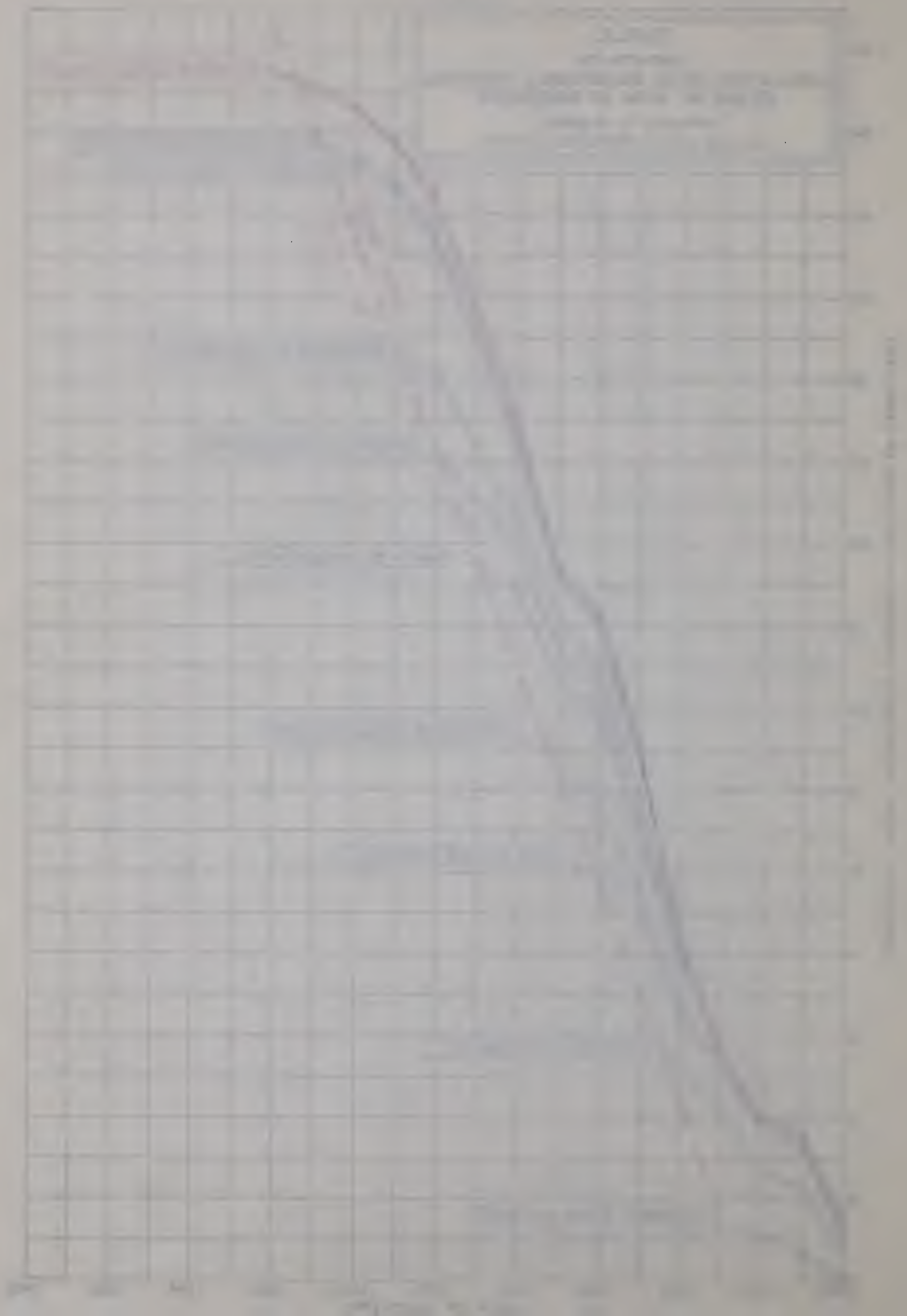
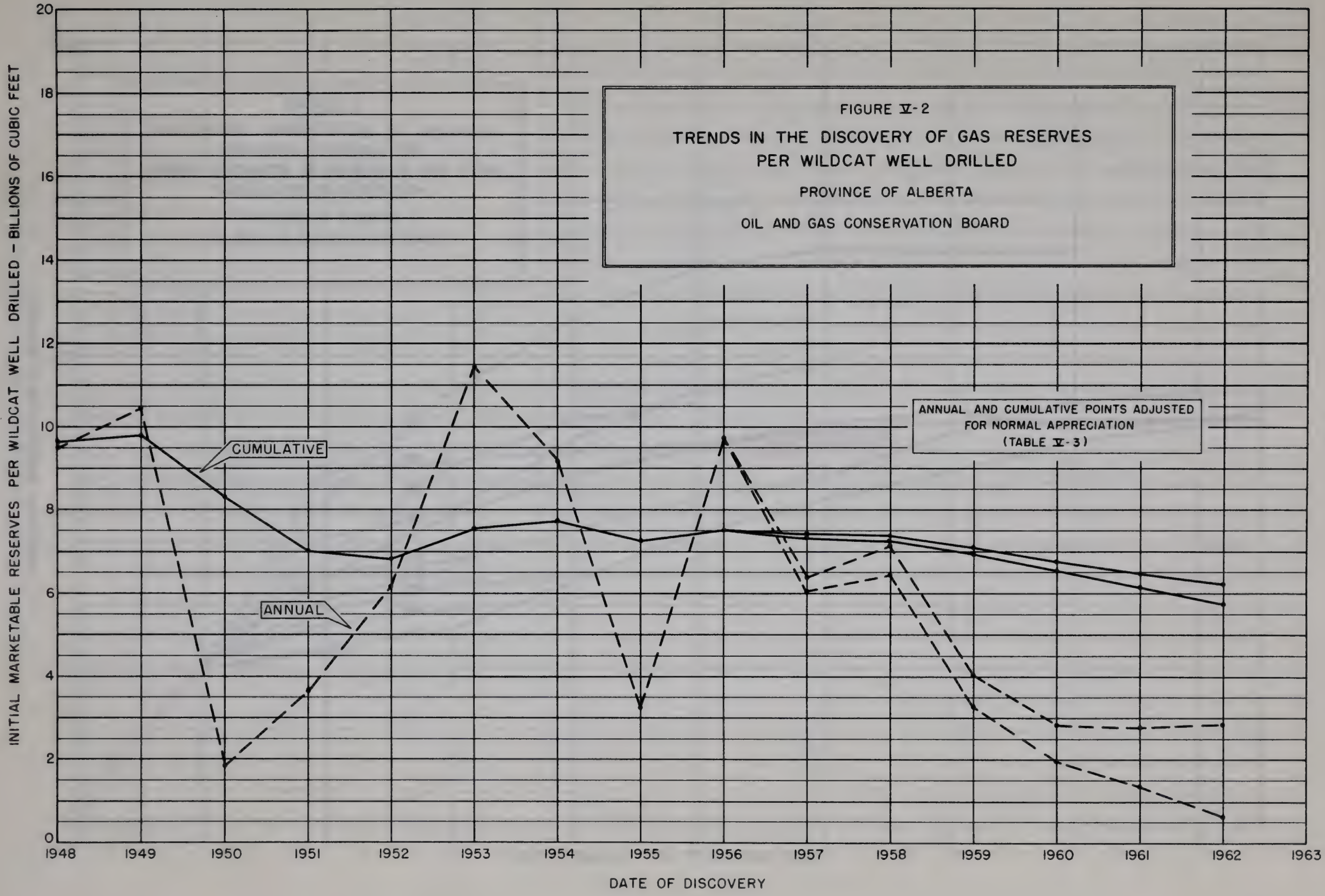


FIGURE V-2

TRENDS IN THE DISCOVERY OF GAS RESERVES PER WILDCAT WELL DRILLED

PROVINCE OF ALBERTA

OIL AND GAS CONSERVATION BOARD



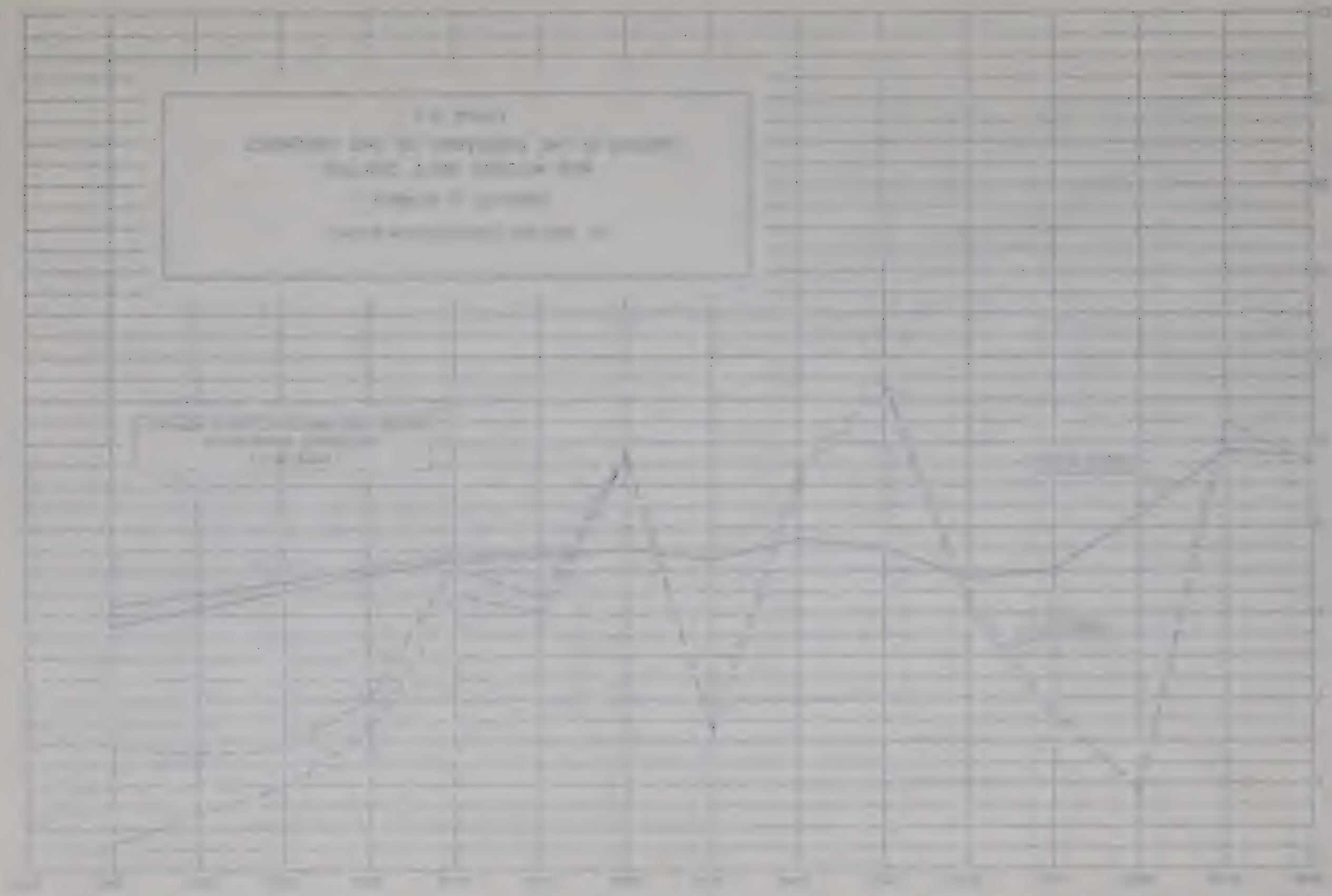


FIGURE V-3

PERCENTAGE APPRECIATION OF RESERVES
BY YEAR OF DISCOVERY
(BASIS: ESTIMATE OF RESERVES ONE YEAR
FROM DATE OF DISCOVERY)

PROVINCE OF ALBERTA
OIL AND GAS CONSERVATION BOARD

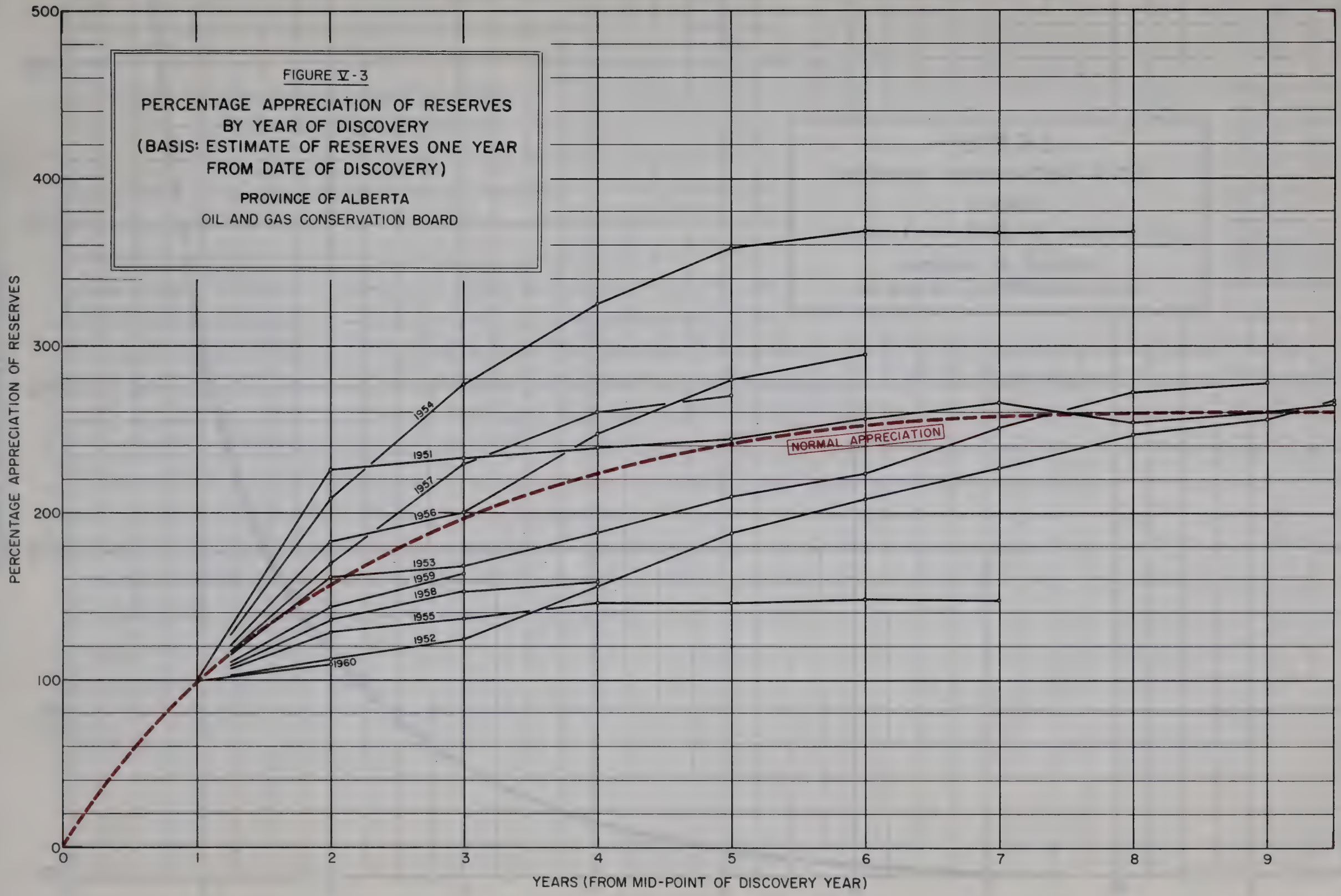


FIGURE V-4

RESERVE APPRECIATION RATIO
VERSUS
YEARS FROM DATE OF DISCOVERY

PROVINCE OF ALBERTA
OIL AND GAS CONSERVATION BOARD

RESERVE APPRECIATION RATIO

3.50
3.00
2.50
2.00
1.50
1.00

0 1 2 3 4 5 6 7 8 9 10

YEARS (DATE OF DISCOVERY TO DATE OF CURRENT ESTIMATE)

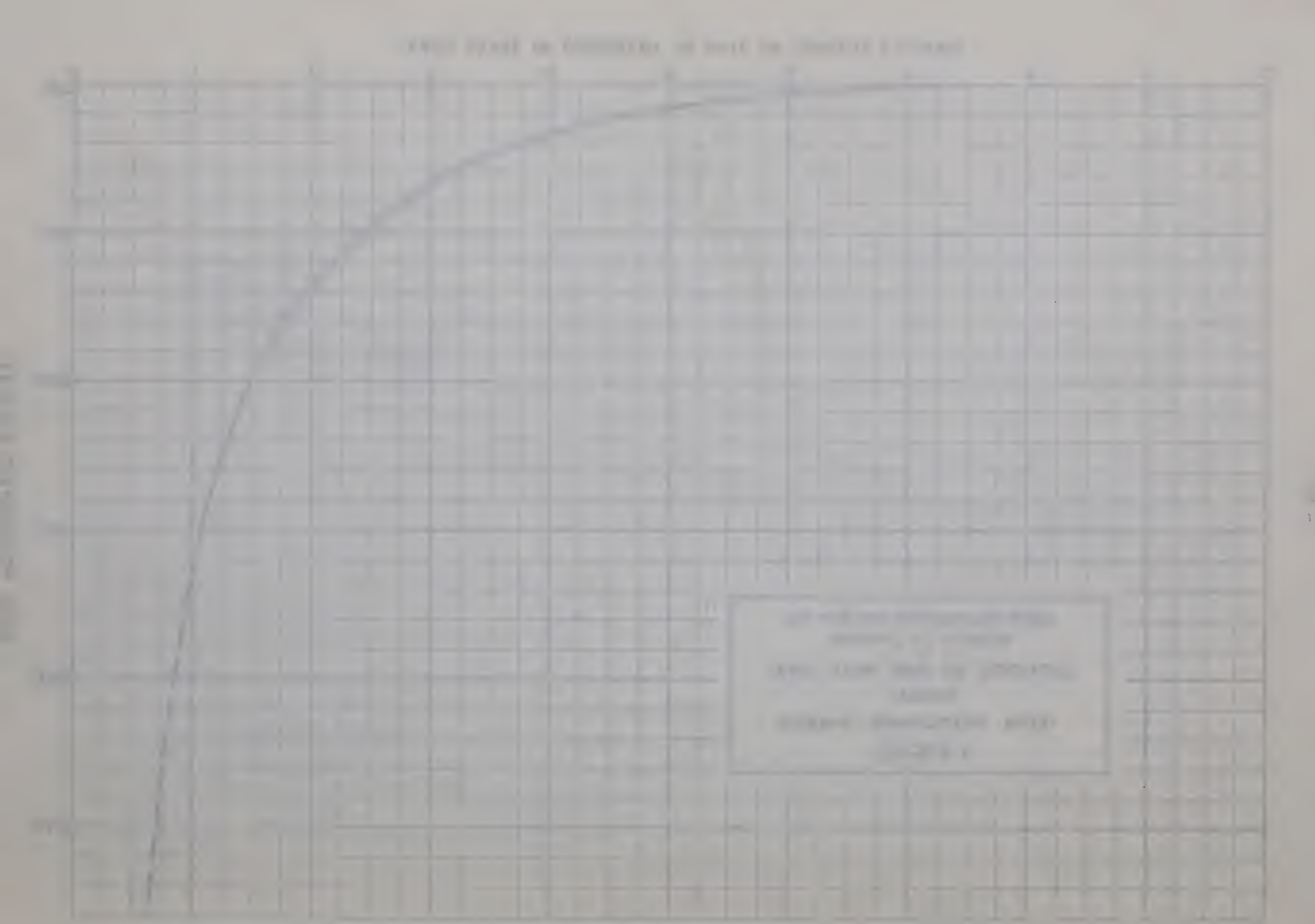


FIGURE V-5

TRENDS IN THE GROWTH OF INITIAL MARKETABLE RESERVES OF GAS

PROVINCE OF ALBERTA

OIL AND GAS CONSERVATION BOARD

CUMULATIVE INITIAL MARKETABLE RESERVES—TRILLIONS OF CUBIC FEET

100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0

30 40 50 60 70 80 90 100 200 300 400 600 800 1000 2000 3000 5000 10,000 20,000

CUMULATIVE WILDCAT WELLS DRILLED

1913 1914 1916 1922 1924 1930 1935 1936-37-38-39 1940-41-42 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962

SEE FIGURE V-6

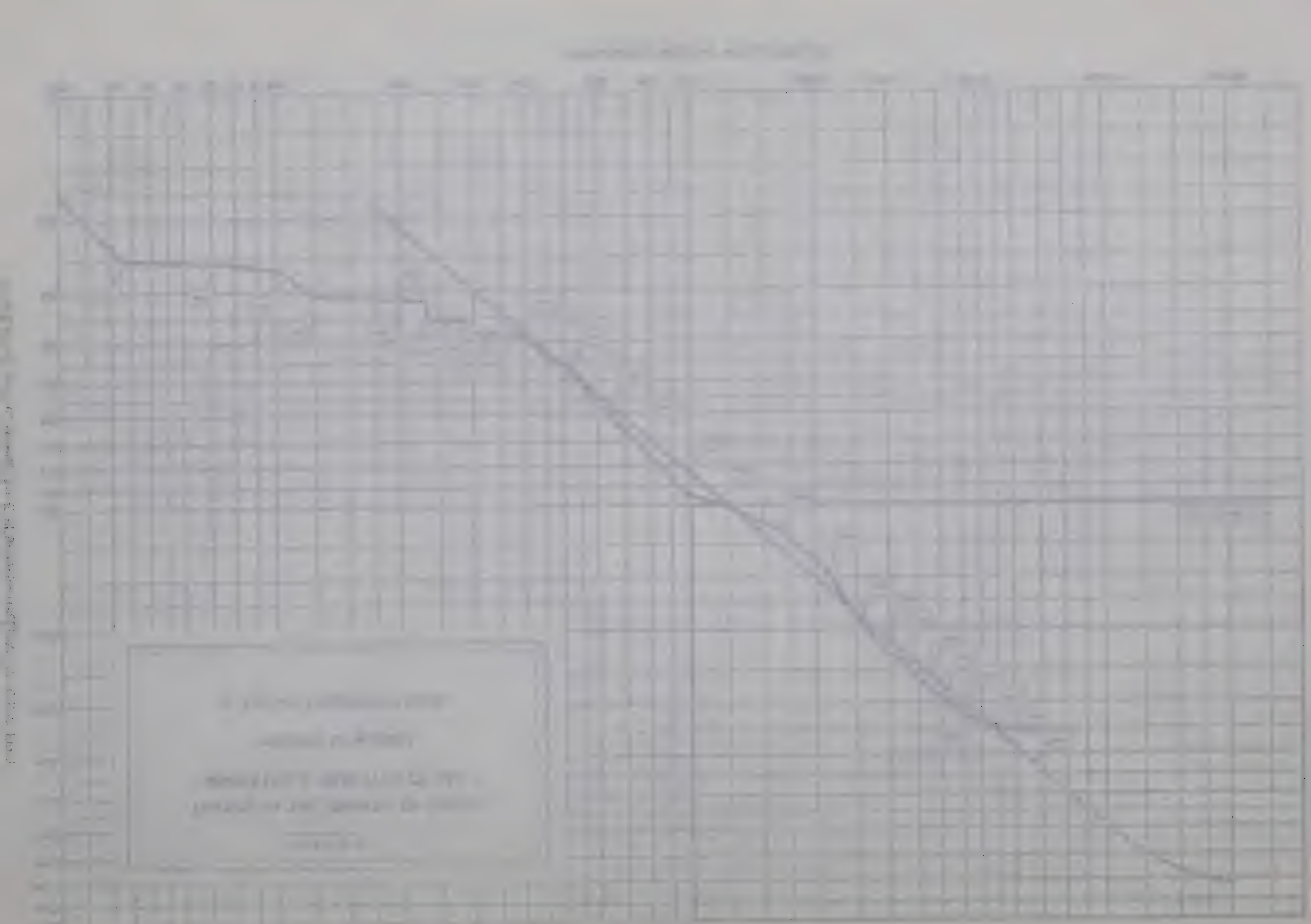


FIGURE V-6

TRENDS IN THE GROWTH OF INITIAL MARKETABLE RESERVES OF GAS

– EXPANSION OF FIGURE V-5

PROVINCE OF ALBERTA

OIL AND GAS CONSERVATION BOARD

CUMULATIVE INITIAL MARKETABLE RESERVES - TRILLIONS OF CUBIC FEET

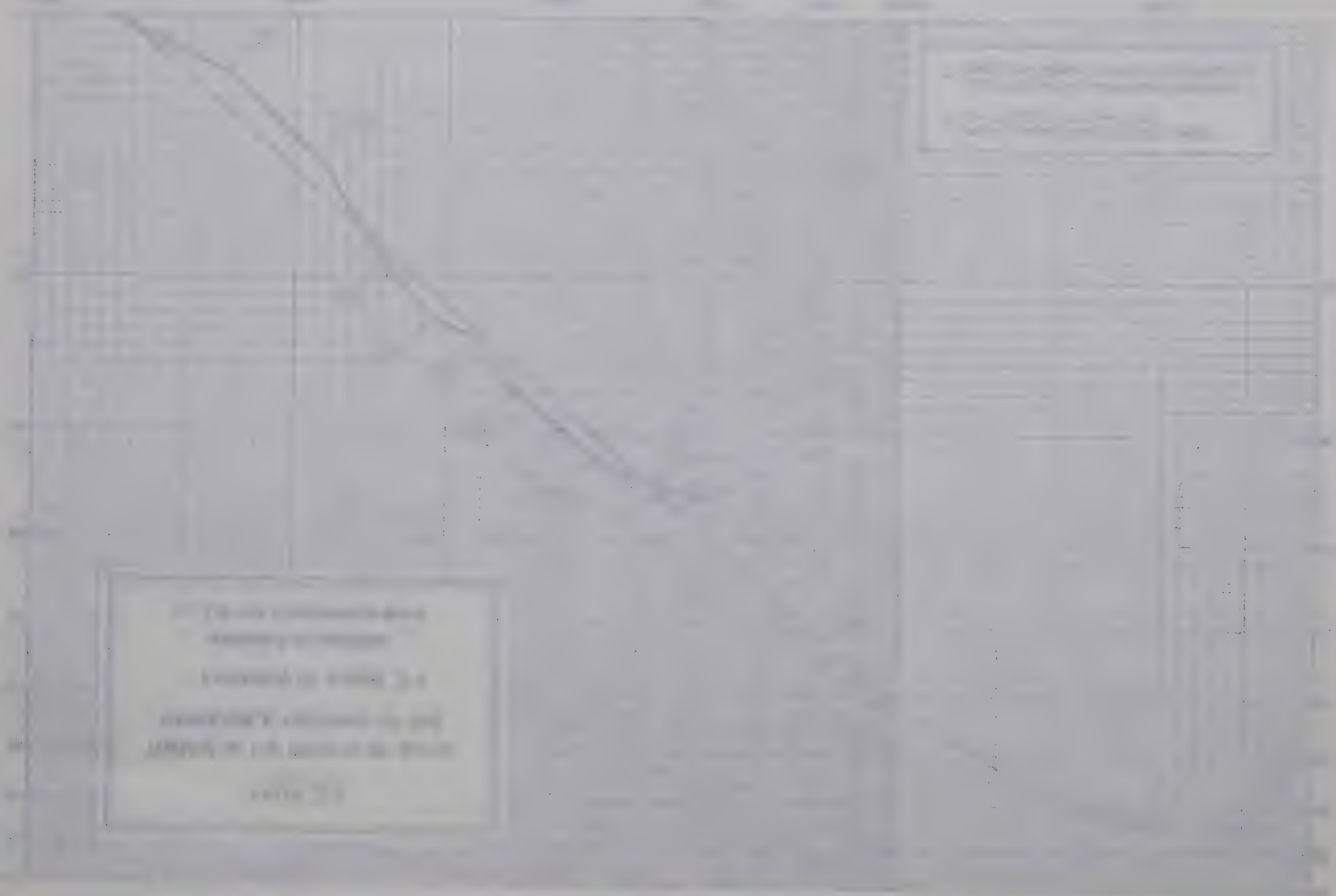
CUMULATIVE WILDCAT WELLS DRILLED

100 90 80 70 60 50 40 30 20 10

1,000 2,000 4,000 6,000 8,000 10,000 20,000

FULLY APPRECIATED RESERVES

1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962

⊙ – INITIAL MARKETABLE RESERVES BASED ON ACTUAL DATA (Table V-2)

▲ – ADJUSTED INITIAL MARKETABLE RESERVES BASED ON NORMAL APPRECIATION (Table V-3)